Self Diagnosis Supported model

SERVICE MANUAL DX-1A CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KV-38DRC2	*RM-Y184*	*E*	*SCC-S49C-A*
KV-38DRC2C	*RM-Y184*	*E*	*SCC-S49D-A*

KV-38DRC2

RM-Y184

TRINITRON® COLOR TELEVISION

SONY®

9-965-912-01

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SPECIFICATIONS

	KV-38DRC2	KV-38DRC2C
Power requirements	120V, 60 Hz	220V, 50 Hz
Number of inputs/outputs		
Video [1]	4	
S Video [2]	3	
Audio [3]	6	
Audio Out [4]	1	
Y, P_B, P_R [5]	2	
Monitor Out	1	
Control-S (in/out)	YES	
Speaker output(W)	7.5W x 4	
Power Consumption(W)		
In use(Max)	245W	
In standby	2W	
Dimensions(W/H/D)		
(mm)	994 x 754.5 x 622 mm	
(in)	39 $^{9}/_{64}$ x 29 $^{45}/_{64}$ x 24 $^{1}/_{2}$ in	
Mass		
(kg)	108 kg	
(lbs)	238 lbs.	

1) 1 Vp-p 75 ohms unbalanced, sync negative
2) Y: 1 Vp-p 75 ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75 ohms
3) Y: 1.0 Vp-p, 75 ohms, sync negative;
PB: 0.7 Vp-p, 75 ohms
PR: Vp-p, 75 ohms
4) 500 mVrms (100% modulation), Impedance: 47 kilohms
5) More than 408 mVrms at the maximum volume setting (variable)
More than 408 mVrms (fix)

Television system
American TV standard, NTSC

Channel coverage
VHF: 2-13/ UHF: 14-69/ CATV: 1-125

Picture tube
FD Trinitron® tube

Visible screen size
36-inch picture measured diagonally

Actual screen size
38-inch measured diagonally

Antenna
75 ohm external terminal for VHF/UHF

Supplied Accessories
Remote Commander RM-Y184
Two Size AA (R6) Batteries

Optional Accessories
Connecting cables: RK-74A, VMC-810S/820/830HGS, VMC-720M, VMC-810S/820S, YC-15V/30V, YC-15/30HG, RKG69HG, RKC-515HG
U/V mixer: EAC-66
TV Stand: S U-36XBR45

Design and specifications are subject to change without notice.

XBR
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SRS (SOUND RETRIEVAL SYSTEM)

The SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

The word 'SRS' and the SRS symbol are registered trademarks of SRS Labs, Inc. BBE and BBE symbol are trademarks of BBE Sound, Inc. and are licensed by BBE Sound, Inc. under U.S. Patent No. 4,638,258 and 4,482,866.

WARNINGS AND CAUTIONS

CAUTION

Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield, or carbon painted on the CRT, after removing the anode.

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the AC power line.

⚠ SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and ⚠ mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

ATTENTION!!

Apres avoir deconnecte le cap de l’anode, court-circuiter l’anode du tube cathodique et celui de l’anode du cap au chassis metallique de l’appareil, ou la couche de carbone peinte sur le tube cathodique ou au blindage du tube cathodique.

Afin d’eviter tout risque d’electrocution provenant d’un chássis sous tension, un transformateur d’isolement doit etre utilisé lors de tout dépannage. Le chássis de ce récepteur est directement raccordé à l’alimentation du secteur.

⚠ ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifies par une trame et par une marque ⚠ sur les schemas de principe, les vues explosees et les listes de pieces sont d’une importance critique pour la securite du fonctionnement. Ne les remplacer que par des composants Sony dont le numero de piece est indique dans le present manuel ou dans des supplements publies par Sony. Les reglages de circuit dont l’importance est critique pour la securite du fonctionnement sont identifies dans le present manuel. Suivre ces procedures lors de chaque remplacement de composants critiques, ou lorsqu’un mauvais fonctionnement suspecte.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instructions.
2. A battery-operated AC milliampmeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson’s 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

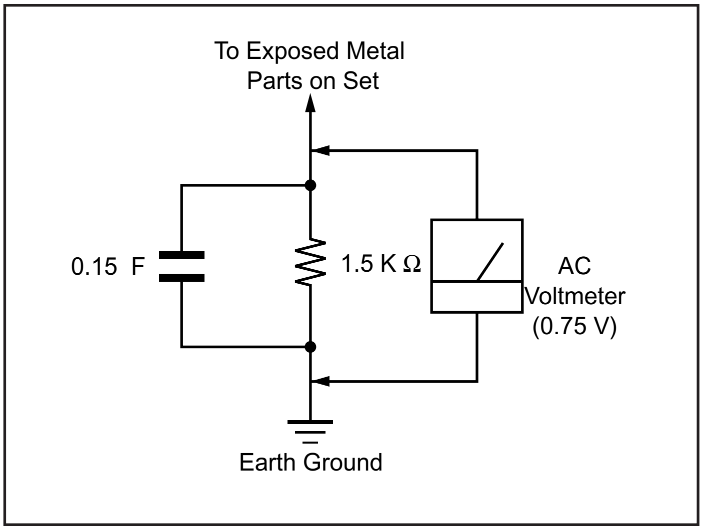


Figure A. Using an AC voltmeter to check AC leakage.

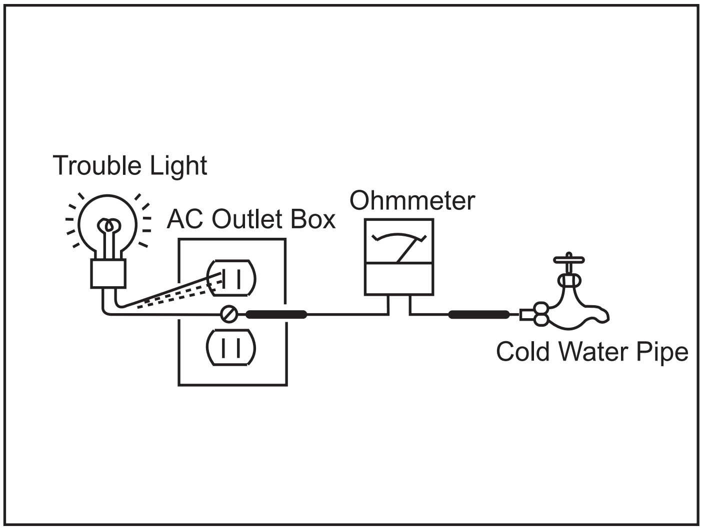


Figure B. Checking for earth ground.

SELF-DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/STEREO LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY/STEREO LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the Remote Commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

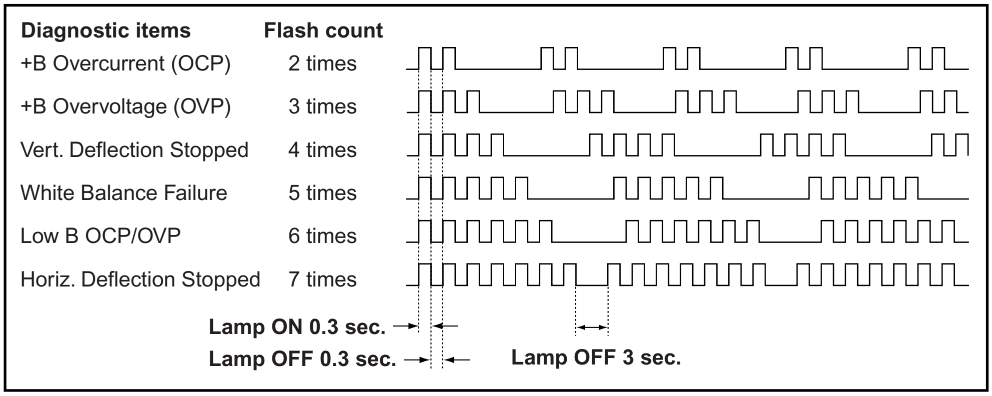
Diagnostic Test Indicators
When an error occurs, the STANDBY/STEREO LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.

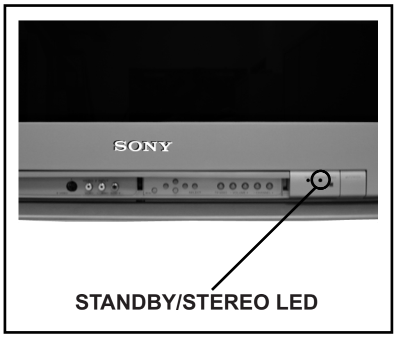
Results for all of the following diagnostic items are displayed on screen. No error has occurred if the screen displays a "0".

Diagnostic Item	No. of times STANDBY/ STEREO lamp flashes	Display Result	Probable Cause Location	Detected Symptoms
Power does not turn on	Does not light		• Power cord is not plugged in. • Fuse is burned out F6001 (A Board).	• Power does not come on. • No power is supplied to the TV. • AC power supply is faulty.
+B Overcurrent (OCP) (See Note 1)	2 times	2:0 or 2:1	• H.OUT (Q5030) is shorted (D Board). • +B PWM (Q5003) is shorted (D Board). • IC9001, IC9002, IC9003 is shorted (C Board).	• Power does not come on. • Load on power line is shorted.
+B Overvoltage (OVP)	3 times	3:0 or 3:1	• IC6505 is faulty (D Board).	• Has entered standby mode.
Vertical Deflection Stopped	4 times	4:0 or 4:1	• ± 15V is not supplied (D Board). • IC5004 is faulty (D Board).	• Has entered standby state after horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
White Balance Failure (not balanced)	5 times	5:0 or 5:1	• Video OUT (IC9001-IC9003) is faulty (C Board). • CRT drive (IC201) is faulty (A Board). • G2 is improperly adjusted (See Note 2).	• No raster is generated. • CRT Cathode current detection reference pulse output is small.
LOW B OCP/OVP (overcurrent/overvoltage) (See Note 3)	6 times	6:0 or 6:1	• +5 line is overloaded (A, B Boards). • +5 line is shorted (A, B Boards). • IC6007 is faulty (A Board).	• No picture.
Horizontal Deflection Stopped	7 times	7:0 or 7:1		• No picture.

Note 1: If a +B Overcurrent is detected, stoppage of the Vertical Deflection is detected simultaneously. The symptom that is diagnosed first by the microcontroller is displayed on screen.
Note 2: Refer to Screen (G2) Adjustment in Section 2-5. of this manual.
Note 3: If STANDBY/STEREO LED flashes six (6) times, unplug the unit and wait 10 seconds before performing the adjustment.

Display of STANDBY/STEREO LED Flash Count





* One flash count is not used for self-diagnostic.

Stopping the STANDBY/STEREO LED Flash
Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/STEREO LAMP from flashing.

Self-Diagnostic Screen Display
For errors with symptoms such as "power sometimes shuts off" or "screen sometimes goes out" that cannot be confirmed, it is possible to bring up past occurrences of failure on the screen for confirmation.

To Bring Up Screen Test
In standby mode, press buttons on the Remote Commander sequentially, in rapid succession, as shown below:

DISPLAY ➡ Channel 5 ➡ Sound volume - ➡ Power ON.

SELF DIAGNOSIS	
2: +B OCP	N/A
3: +B OVP	N/A
4: V STOP	0
5: AKB	1
6: LOWB	0
7: H-STOP	0
101: WDT	24

Numeral "0" means that no fault was detected.

Numeral "1" means a fault was detected one time only.

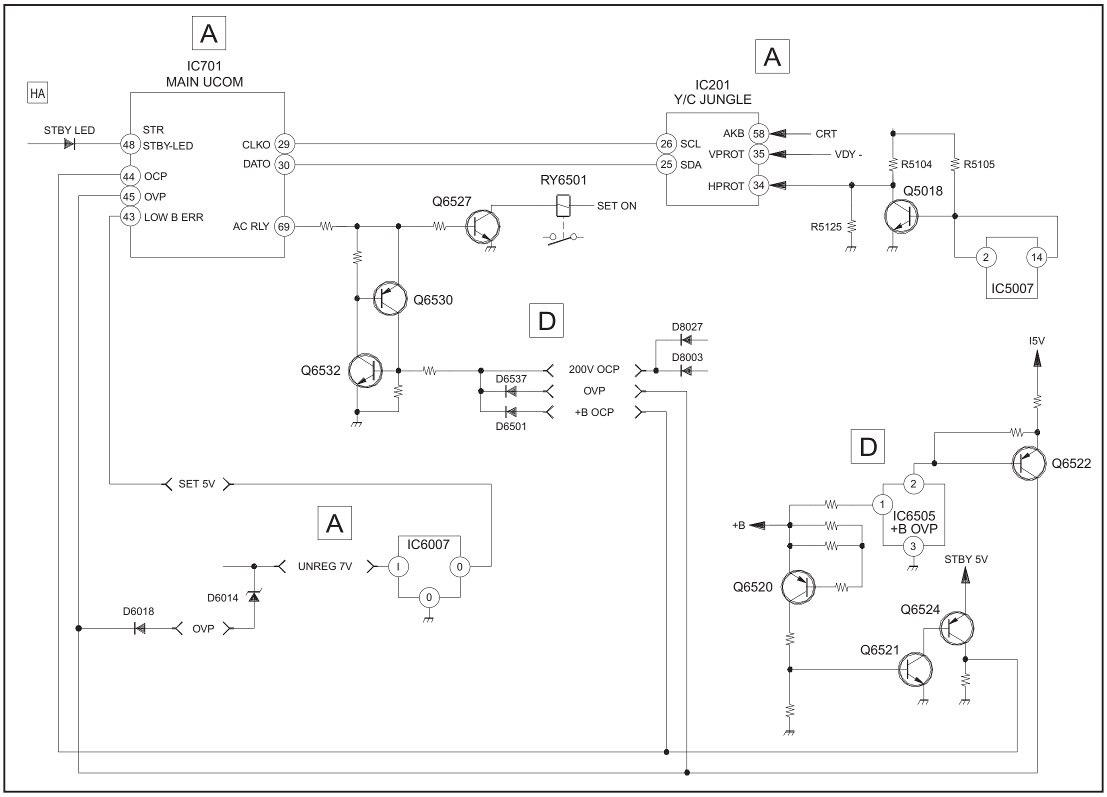
Handling of Self-Diagnostic Screen Display
Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to "0".
Unless the result display is cleared to "0", the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

Clearing the Result Display
To clear the result display to "0", press buttons on the Remote Commander sequentially when the diagnostic screen is displayed, as shown below:

Channel 8 ➡ ENTER

Quitting the Self-Diagnostic Screen
To quit the entire self-diagnostic screen, turn off the power switch on the Remote Commander or the main unit.

Self-Diagnostic Circuit



+B Overcurrent (OCP)
Occurs when an overcurrent (more than 6A) on the +B (135V) line is detected by R6598/R6591. It will cause Q6520 to turn on and force the AC relay to turn off through Q6532 and Q6530.

+B Overvoltage (OVP)
Occurs when 1) overvoltage (more than +140V) on the +B (135V) line is detected by IC6505, or 2) an overvoltage (more than 7.5 V) on the unreg 7V line is detected by D6014. The AC relay will turn off through Q6532 and Q6530.

Vertical Deflection Stopped
Occurs when an absence of the vertical deflection pulse is detected by IC201. Power supply will shut down when waveform interval exceeds 2 seconds.

White Balance Failure
If the RGB levels* do not balance within 2 seconds after the power is turned on, this error will be detected by IC201. TV will stay on, but there will be no picture.

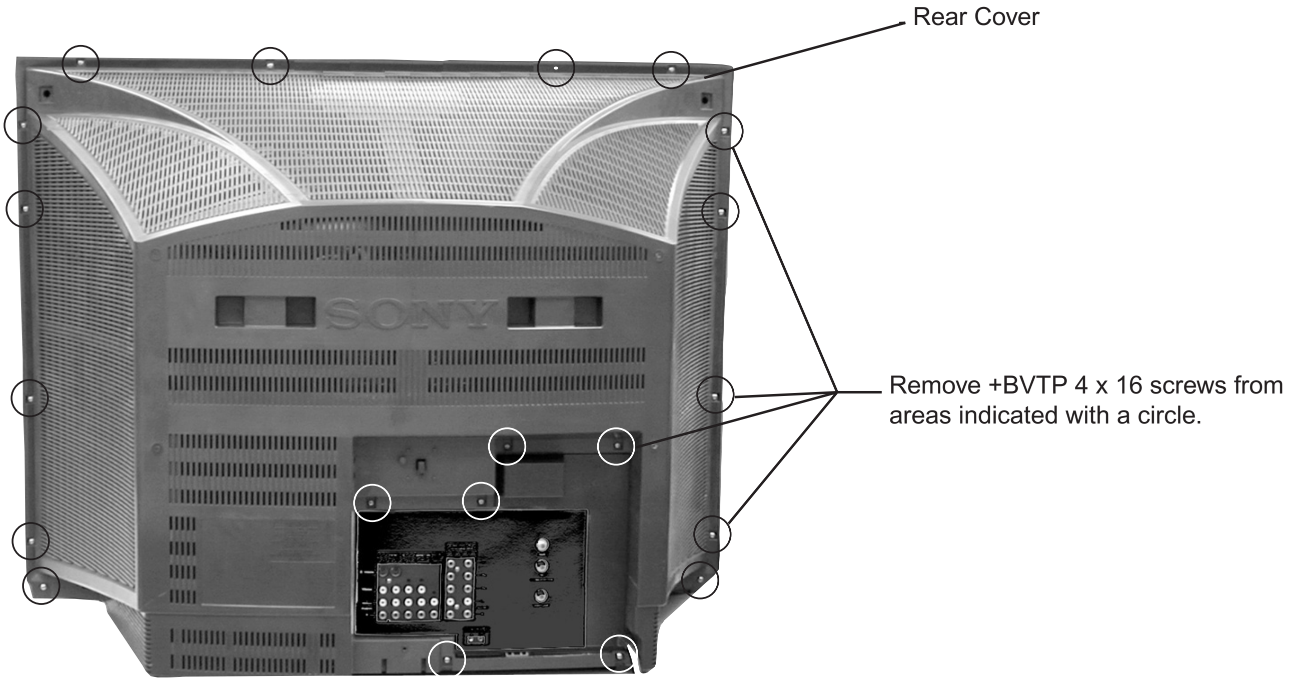
*(Refers to the RGB levels of the AKB detection Ref pulse that detects 1K).

Low B OCP/OVP Error
Occurs when set 5V is out.

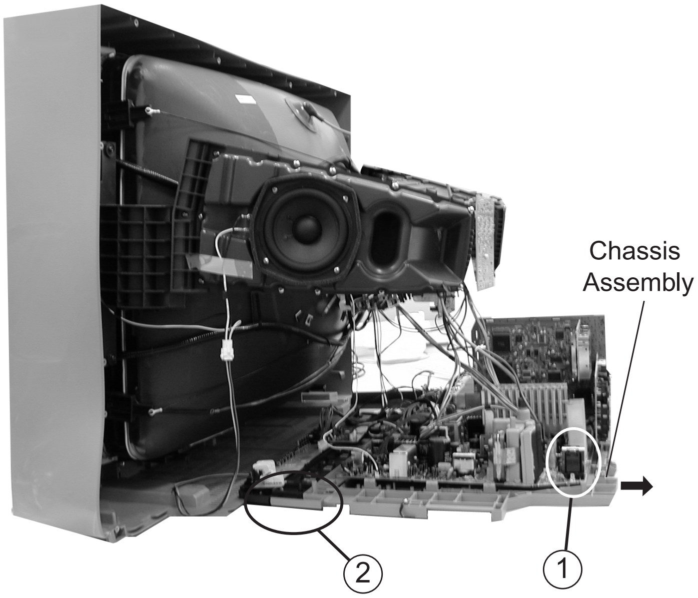
Horizontal Deflection Stopped
Occurs when either: 1) a +B overcurrent is detected (IC5007), or 2) overheating is detected (Thermistor TH5002).

SECTION 1: DISASSEMBLY

1-1. REAR COVER REMOVAL



1-2. CHASSIS ASSEMBLY REMOVAL



(1) **CAUTION!** - Heat sink on IC5004 is -15V. Care must be taken not to allow heat sink to touch any other components.

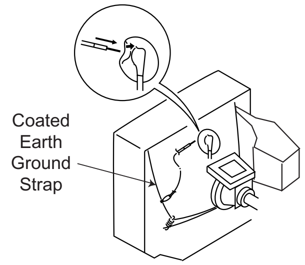
(2) Lift lever up on the right and left sides of the chassis bracket and gently pull the chassis assembly away from the bezel.

1-3. SERVICE POSITION

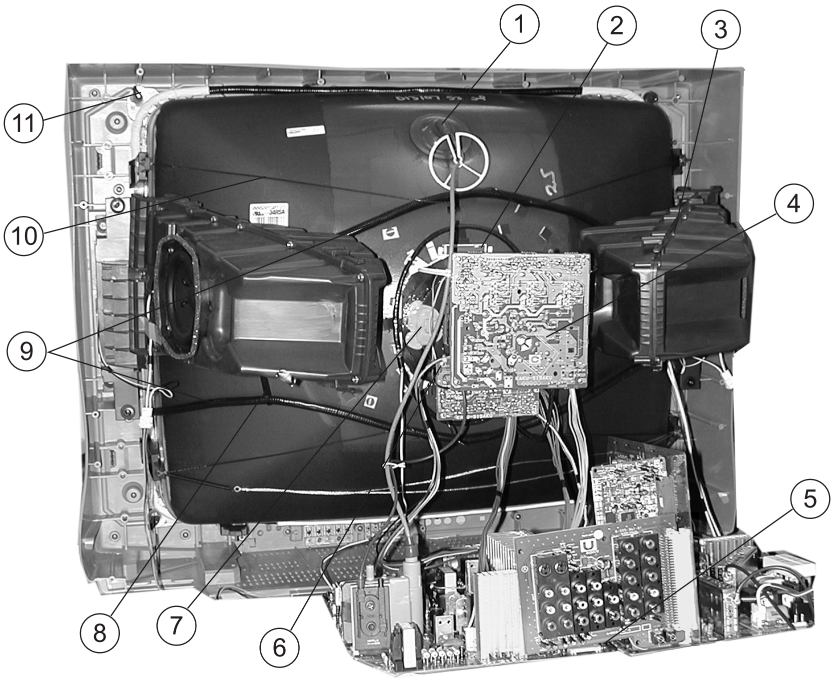
(1) Pull up and rotate both the A and D Boards in order to service the unit.

1-4. PICTURE TUBE REMOVAL

WARNING: BEFORE REMOVING THE ANODE CAP
High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT before attempting to remove the anode cap. Short between anode and CRT coated earth ground strap.



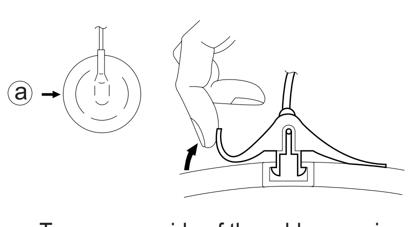
1. Discharge the anode of the CRT and remove the anode cap.
2. Unplug all interconnecting leads from the deflection yoke, neck assembly, degaussing coils and CRT grounding strap.
3. Remove the Speaker Assemblies.
4. Remove the C Board from the CRT.
5. Remove the chassis assembly.
6. Loosen the neck assembly fixing screw and remove.
7. Loosen the deflection yoke fixing screw and remove.
8. Place the set with the CRT face down on a cushion and remove the degaussing coil holders.
9. Remove the degaussing coils.
10. Remove the CRT grounding strap and spring tension devices.
11. Unscrew the four CRT fixing screws [located on each CRT corner] and remove the CRT [Take care not to handle the CRT by the neck].



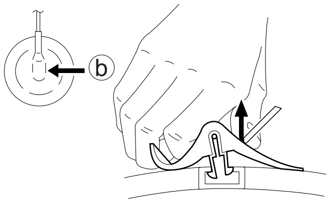
ANODE CAP REMOVAL PROCEDURE

WARNING: High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT **before** attempting to remove the anode cap. Short between anode and coated earth ground strap of CRT.
NOTE: After removing the anode cap, short circuit the anode of the picture tube and the anode cap to either the metal chassis, CRT shield, or carbon painted on the CRT.

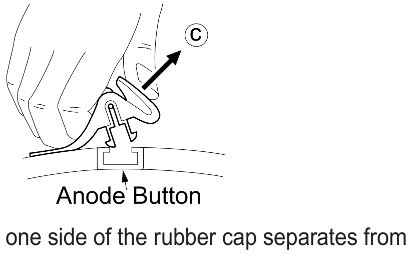
REMOVAL PROCEDURES



Turn up one side of the rubber cap in the direction indicated by arrow (a) .



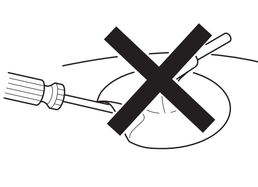
Use your thumb to pull the rubber cap firmly in the direction indicated by arrow (b) .

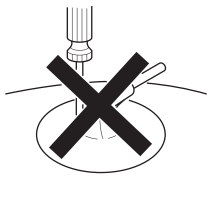


When one side of the rubber cap separates from the anode button, the anode cap can be removed by turning the rubber cap and pulling it in the direction of arrow (c) .

HOW TO HANDLE AN ANODE CAP

1. Do not use sharp objects which may cause damage to the surface of the anode cap.
2. To avoid damaging the anode cap, do not squeeze the rubber covering too hard. A material fitting called a shatter-hook terminal is built into the rubber.
3. Do not force turn the foot of the rubber cover. This may cause the shatter-hook terminal to protrude and damage the rubber.





SECTION 2: SET-UP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switch should be set as follows unless otherwise noted:

VIDEO MODE: STANDARD (RESET)

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G2)
5. White Balance

Test Equipment Required:

1. Color Bar Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital Multimeter

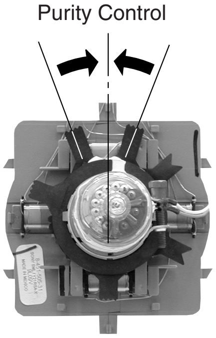
2-1. BEAM LANDING

Preparation:

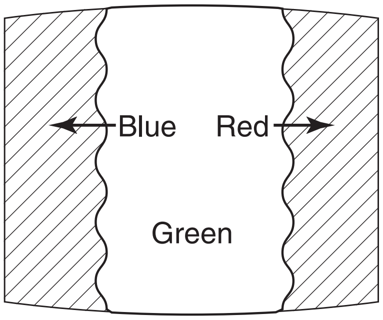
- Input a white pattern signal.
- Face the picture tube in an East or West direction to reduce the influence of geomagnetism.

NOTE: Do not use the hand degausser; it magnetizes the CRT .

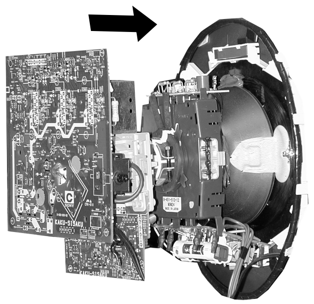
1. Input white pattern from pattern generator. Set the PICTURE control to maximum, and the BRIGHTNESS control to standard.
2. Perform Focus, G2 and White Balance adjustments.
3. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown below:



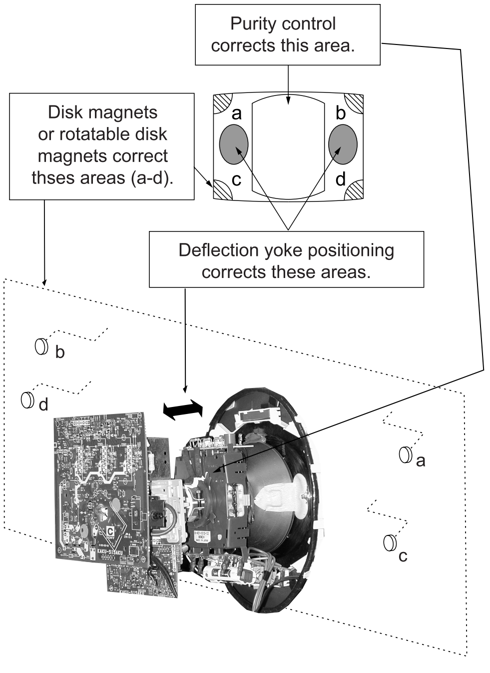
4. Input a green pattern from the pattern generator.
5. Move the deflection yoke backwards, and adjust with the purity control so that green is in the center and red and blue are even on both sides.



6. Move the deflection yoke forward, and adjust so that the entire screen becomes green.



7. Switch over the raster signal to red and blue and confirm the condition.
8. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw.
9. If landing at the corner is not right, adjust it by using the disk magnets.



2-2. V-PIN AND V-CEN ADJUSTMENT

Preparation:
- Input a cross hatch pattern signal.
- Face the picture tube in a North/South direction and correct rotation.
- Set Video Mode to: Standard (Reset)

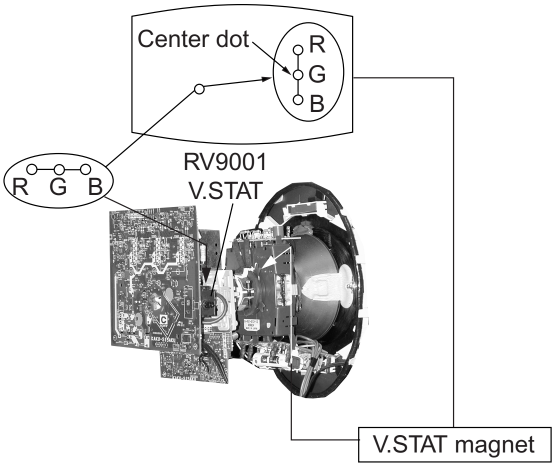
1. Adjust service mode CXA2150D-1 04 V-CEN so that the top pin and bottom pin are symmetrical from top to bottom.
2. Adjust service mode CXA2150D-1 05 V-PIN so that the top pin and bottom pin are symmetrical from top to bottom.
3. Lines should be straight from left to right. Check landing for side effect.

2-3. CONVERGENGE

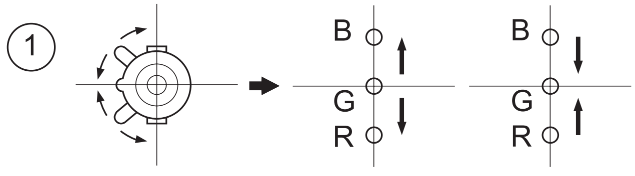
Preparation:
- Set the CONTRAST and BRIGHTNESS control to 50%.
- Input HD dot pattern.

2-3.1. VERTICAL AND HORIZONTAL STATIC CONVERGENCE

1. Disconnect the dynamic convergence before adjusting static convergence (CN5510), except for minor touch-up.
2. Adjust H.STAT convergence, RV9001, to converge red, green, and blue dots in the center of the screen.
3. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen.



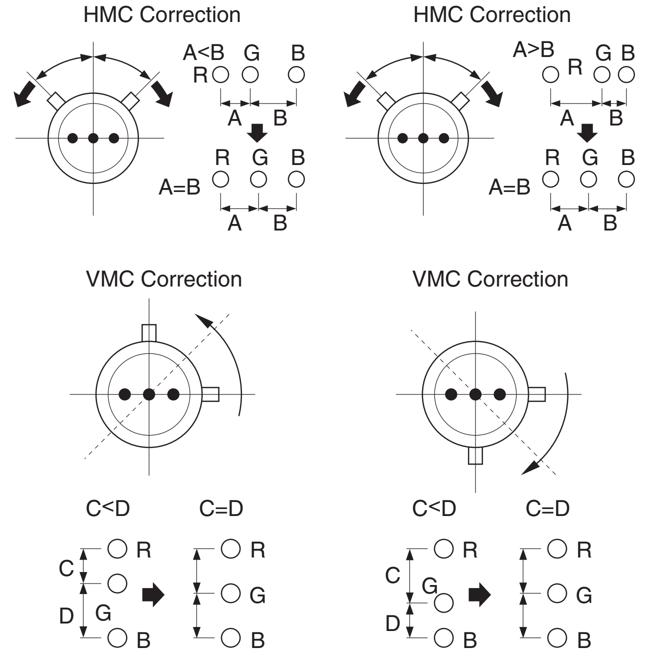
4. Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



2-3.2. OPERATION OF BMC (HEXAPOLE) MAGNET

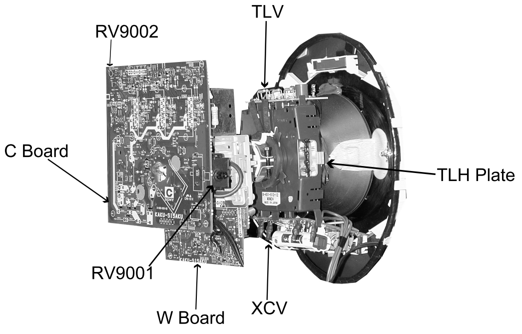
The respective dot positions result from moving each magnet interact. Perform the following adjustments while tracking.

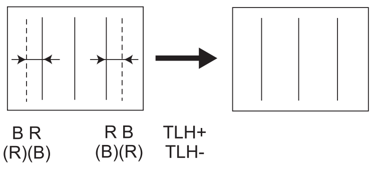
1. Use the V.STAT tabs to adjust the red, green and blue dots so that they line up at the center of the screen (move the dots in a horizontal direction).



2-3.3. TLH PLATE ADJUSTMENT

Preparation:
- Input a cross hatch pattern signal.
- Adjust PICTURE QUALITY to Standard, PICTURE and BRIGHTNESS to 50%, and OTHER to Standard.
- Adjust unbalanced horizontal convergence of red and blue dots by adjusting the TLH Plate on the deflection yoke.





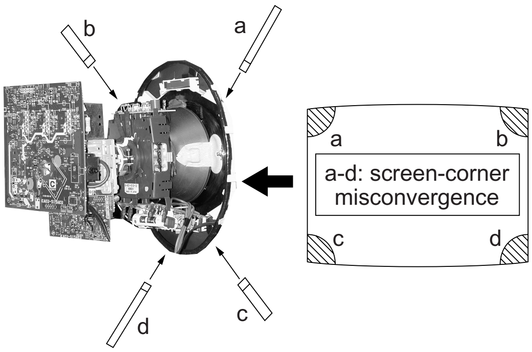
1. Adjust XCV core to balance X axis.
2. Adjust the vertical red and blue convergence with V.TILT (TLV VR).
   Note: Perform adjustments while tracking Item 1.

2-3.4. SCREEN-CORNER CONVERGENCE

Preparation:

- Input a cross hatch pattern signal.

1. Affix a permalloy assembly corresponding to the misconverged areas.



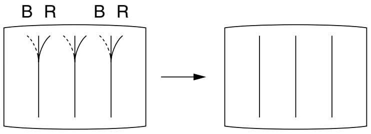
2-3.5. DYNAMIC CONVERGENCE ADJUSTMENTS

Set dynamic convergence using the following service mode adjustment data.

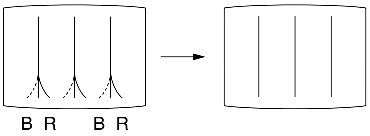
CXA8070AP

NO.	Register	Function	Data Length	Initial Data
1	YBWU	VCA9	0-63	31
2	YBWL	VCA10	0-63	31
3	RSAP	DC-AMP1	0-63	31
4	RUBW	VCA5	0-63	31
5	RLBW	VCA6	0-63	31
6	LSAP	DC-AMP2	0-63	31
7	LUBW	VCA10	0-63	31
8	LLBW	VCA2	0-63	31

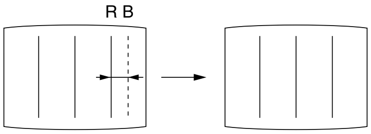
1. YBWU (Upper Y-BOW)



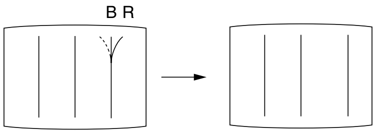
2. YBWL (Bottom BOW)



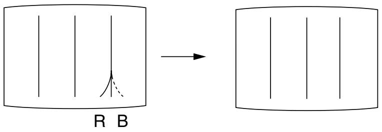
3. RSAP (Right AMP)



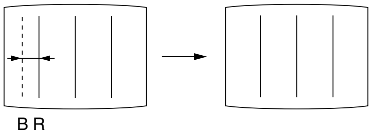
4. RUBW (Right Side Upper C-BOW)



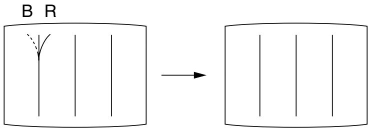
5. RLBW (Right Side Bottom C-BOW)



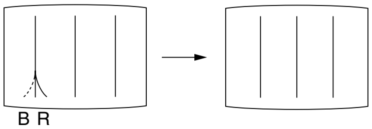
6. LSAP (Left AMP)



7. LUBW (Left Side Upper C-BOW)



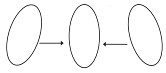
8. LLBW (Left Side Bottom C-BOW)



2-4. FOCUS ADJUSTMENT

1. Input a dot signal.
2. Set Video Mode to STANDARD.
3. Adjust focus VR counter-clockwise to confirm that the dot's shape is centered.
4. Input a HP monoscope signal.
5. Confirm center focus with focus VR.

DOT SHAPE:



2-5. SCREEN (G2)

1. Input a monoscope pattern (NTSC).
2. Set to service mode and adjust as follows:

CXA2150P-2

NO.	Disp.	Item	Avg.
0	ALBK	ALL_BLK	0

3. Adjust RV9002 on the C Board so that the voltage on red, green and blue cathodes is 170.0 0.5 V DC.
4. Adjust the hotizontal line at the top of the screen so it is cut off.
   Note: Never set ALBK to 1 when external power supply is connected to cathode.

2-6. PICTURE QUALITY ADJUSTMENTS

Preparation:
- Set PRO MODE (Picture: MAX, GAMMA: 0).
- Dynamic-color: Off (=Trinitron: MID).
- Set the Service Mode to the following:

C2150P-4

NO.	Name	Control Function	Avg. Data
06	UDCL	Dynamic Color: OFF	0
08	UGRAM	GRAMMA	5
15	DCTR	DC-TRAN	2
16	DPIC	DYNAMIC PIC: OFF	1

1. Input signal (480i):
   - Color Bar Video 75 IRE (White) 75% modulation 7.5% Set-up.
   - Color Bar RF 75 IRE (White) 75% modulation 7.5% Set-up.

2-6.1. VIDEO INPUT - TWO PICTURE SUB CONTRAST ADJUSTMENT

Preparation:
- Input a Color Bar signal to VIDEO 1 (75 IRE 75%).
- Set picture mode: P&P (PRO MODE).

1. Set to Service Mode and adjust as follows:

2150P-4

NO.	Name	Control Function	Avg. Data
00	UPIC	PICTURE	63
02	UCOL	COLOR	0

2150P-2

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	4

INITIAL DATA (IMPORTANT)

2150P-4

NO.	Name	Control Function	Avg. Data
23	SCON	SUB-CONT	9

2103-1

NO.	Name	Control Function	Avg. Data
00	YLEV	Y-OUT	23

2103-2

NO.	Name	Control Function	Avg. Data
00	YLEV	Y-OUT	23

2. Connect oscilloscope to Pin 1 of CN9001 (R.DRV) on the C Board.
3. Adjust MAIN (left) side contrast according to Service Mode for SCON.

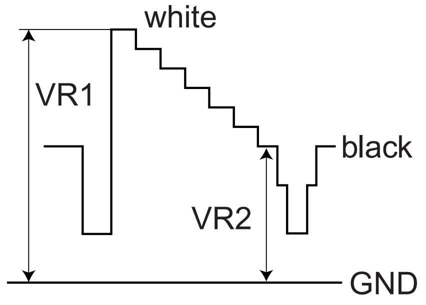
2103-1

NO.	Name	Control Function
02	SCON	SUB-CONT

4. Adjust SUB (right) side contrast according to Service Mode for SCON.

2103-2

NO.	Name	Control Function
02	SCON	SUB-CONT



VR1-VR2 = △VR = 2.00 ± 0.05 Vp-p

5. Write data from Steps 3 and 4 above, into memory.

2-6.2. VIDEO INPUT - SUB HUE/SUB COLOR ADJUSTMENT

Preparation:
- Input a Color Bar signal to VIDEO 1 (75 IRE 75%).
- Set picture mode: P&P (PRO MODE).

1. Set to Service Mode and adjust as follows:

2150P-4

NO.	Name	Control Function	Avg. Data
00	UPIC	PICTURE	63
02	UCOL	COLOR	31

2150P-2

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	7

2. Connect an oscilloscope to Pin 5 of CN9001 (B. DRV) on the C Board.
3. Adjust MAIN (left) side color according to Service Mode for SCOL.
4. Adjust MAIN (left) side color according to Service Mode for SHUE.

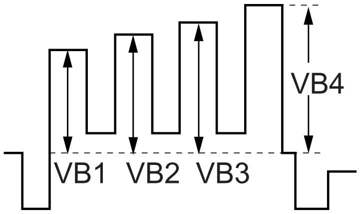
2103-1

NO.	Name	Control Function
03	SCOL	SUB-COL
04	SHUE	SUB-HUE

5. Adjust SUB (right) side color according to Service Mode for SCOL.
6. Adjust SUB (right) side color according to Service Mode for SHUE.

2103-2

NO.	Name	Control Function
03	SCOL	SUB-COL
04	SHUE	SUB-HUE



COLOR: VB1 ≤ VB4 (=VB1 + 0~90 mV)
HUE: VB2 ≤ VB3 (=VB2 + 0~90 mV)
(HUE: Adjust data -2 STEP)

7. Write data into memory.

2-6.3. RF INPUT - TWO PICTURE SUB CONTRAST ADJUSTMENT

Preparation:
- Input a Color Bar signal to RF (75 IRE 75%).
- Set picture mode: P&P (PRO MODE).

1. Set to Service Mode and adjust as follows:

2150P-4

NO.	Name	Control Function	Avg. Data
00	UPIC	PICTURE	63
02	UCOL	COLOR	0

2150P-2

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	4

INITIAL DATA (IMPORTANT)

2150P-4

NO.	Name	Control Function	Avg. Data
23	SCON	SUB-CONT	9

2103-1

NO.	Name	Control Function	Avg. Data
00	YLEV	Y-OUT	23

2103-2

NO.	Name	Control Function	Avg. Data
00	YLEV	Y-OUT	23

Note: Use the same average data as 2-6.1., Items 3 - 4 after the adjustment.

2. Connect an oscilloscope to Pin 1 of CN9001 (R. DRV) on the C Board.
3. Adjust MAIN (left) side contrast according to service mode for SCON.

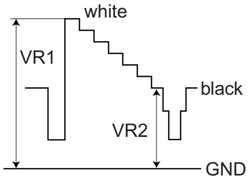
2103-1

NO.	Name	Control Function
02	SCON	SUB-CONT

4. Adjust SUB (right) side contrast according to Service Mode for SCON.

2103-2

NO.	Name	Control Function
02	SCON	SUB-CONT



VR1-VR2 = △VR = 2.00 ± 0.05 Vp-p

5. Write data from Steps 3 - 4 above, into memory.

2-6.4. RF INPUT - SUB HUE/SUB COLOR ADJUSTMENT

Preparation:
- Input a Color Bar signal to RF (75 IRE 75%).
- Set picture mode: P&P (PRO MODE).

1. Set to Service Mode and adjust as follows:

2150P-4

NO.	Name	Control Function	Avg. Data
00	UPIC	PICTURE	63
02	UCOL	COLOR	31

2150P-4

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	7

INITIAL DATA (IMPORTANT)

2150P-4

NO.	Name	Control Function	Avg. Data
24	CLOF	OFFSET for UCOL	8
25	HUOF	OFFSET for UHUE	4

2103-1

NO.	Name	Control Function	Avg. Data
01	CLEV	CB & CR-OUT	17
20	CBOF	CB-OFFSET	31
21	CROF	CR-OFFSET	31

2103-2

NO.	Name	Control Function	Avg. Data
01		CB & CR-OUT	18
20	CBOF	CB-OFFSET	31
21	CROF	CR-OFFSET	31

Note: Use the same average data as 2-6.2., Items 3-6 after the adjustment.

2. Connect an oscilloscope to pin 5 of CN9001 (B. DRV) on the C Board.
3. Adjust MAIN (left) side color according to Service Mode for SCOL.
4. Adjust MAIN (left) side color according to Service Mode for SHUE.

2103-1

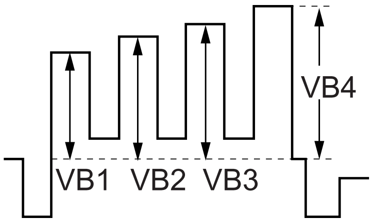
NO.	Name	Control Function
03	SCOL	SUB COLOR
04	SHUE	SUB HUE

5. Adjust SUB (right) side color according to Service Mode for SCOL.

6. Adjust SUB (right) side color according to Service Mode for SHUE.

2103-2

NO.	Name	Control Function
03	SCOL	SUB COLOR
04	SHUE	SUB HUE



COLOR: VB1 ≤ VB4 (=VB1 + 0~90 mV)
HUE: VB2 ≤ VB3 (=VB2 + 0~90 mV)
(HUE: Adjust data -2 STEP)

7. Write data into memory.

2-7. WHITE BALANCE (CRT) AND SUB BRIGHT ADJUSTMENT

Preparation

- Input an all white 480I (15.734 KHz) signal into the VIDEO 1 input terminal to perform the White Balance (highlight, cut-off) adjustments. The parameters to adjust are in the CXA2150P in Service Mode.

1. Set the following:
   Picture: Full Mode
   Pro Mode
   Color: Center
2. Adjust White Balance in the Service Mode and set the following data:

2150P-1

NO.	Name	Control Function	Avg. Data
05	RDRV	R-DRIVE	Fix: 41
06	GDRV	G-DRIVE	Adjust
07	BDRV	B-DRIVE	Adjust
08	RCUT	R-CUT OFF	Fix: 41
09	GCUT	G-CUT OFF	Adjust
10	BCUT	B-CUT OFF	Adjust

3. Adjust Sub Brightness: Input an all black signal (to IRE 7.5% set up) 480i (15.75 KHz) signal into the VIDEO 1 input terminal. Adjust the following parameter of CXA2150P-1:
4. Check Initial Data (Important).

CXA2150P-1

NO.	Name	Control Function	Avg. Data
04	SBRT	SUB-BRIGHT	Adjust

2150P-1

NO.	Name	Control Function	Avg. Data
00	SBOT	SUB-BRT OFFSET	7
12	SBOF	SUB-BRT OFFSET	63

5. Repeat Steps 2-4.

2-8. RASTER CENTER ADJUSTMENT

Preparation:

- Input a monoscope signal.
- Set to NTSC (DRC) mode.

1. Set to Service Mode and adjust as follows:

CXA2150P-2

NO.	Name	Control Function	Avg. Data
06	AGNG	AGING 1, AGING 2	2

CXA2150D-2

NO.	Name	Control Function	Avg. Data
02	HSIZ	Horiz Size	45

CXA2150D-3

NO.	Name	Control Function	Avg. Data
00	HBLK	Blanking Enable	0

2. Reduce HSIZ to see sides of raster.
3. Adjust H-Center with CXA2150D-2 00.
4. Adjust to the best screen position with H-CENT and write data.
5. Restore aging, HSIZ and HBLK to original condition.

2-9. PICTURE DISTORTION ADJUSTMENTS

2-9.1. NTSC (DRC) FULL MODE ADJUSTMENT

1. Face the picture tube in an east-west direction.
2. Complete V-PIN and V-CEN adjsuments first (A2150-D1 05 V-PIN, A2150-D1 04 V-CEN).
3. Input a monoscope and crosshatch signal. Adjust the picture distortion with the following service parameters to balance the best condition for these two signals.

A2150-D1	00	VPOS
A2150-D1	01	VSIZ
A2150-D1	02	VLIN
A2150-D1	03	VSCO
A2150-D1	04	VCEN
A2150-D1	05	VPIN
A2150-D1	07	HTPZ

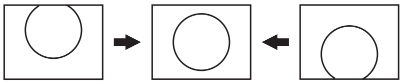
A2150-D2	01	HPOS
A2150-D2	02	HSIZ
A2150-D2	03	SLIN
A2150-D2	04	MPIN
A2150-D2	06	UCP
A2150-D2	07	LCP
A2150-D2	13	PPHA
A2150-D2	14	VANG
A2150-D2	15	LANG
A2150-D2	16	VBOW
A2150-D2	17	LBOW

Note: Make sure that the picture size is within specs. Vertical size is 11.7 ± 0.1 sq. and horizontal size is 15.6 ± 0.1 sq.

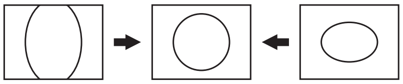
4. Write data into memory and then set the screen to 1080i mode.

CXA2150D-1

0. VPOS (V-POSITION)



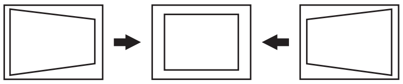
1. VSIZ (V-SIZE)



2. VLIN (V-LINE)

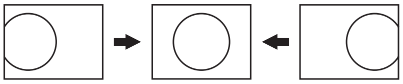
3. VSCO (VS-COR)

7. HTPZ (H-TRAPEZOID)

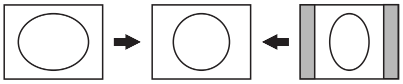


CXA2150D-2

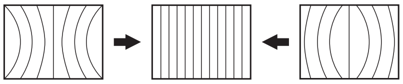
1. HPOS (H-POSITION)



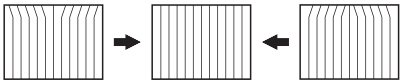
2. HSIZ (H-SIZE)



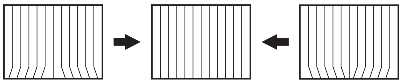
5. PIN (PIN AMP)



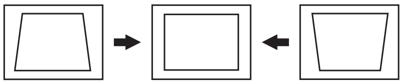
6. UCP (UP COR PIN COR)



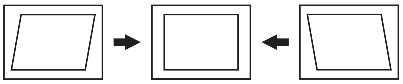
7. LCP (LOW CO PIN COR)



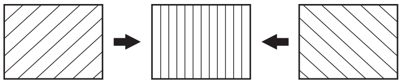
13. PPHA (PIN PHASE)



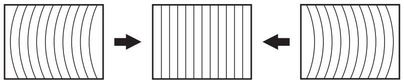
14. VANG (AFC-ANGLE)



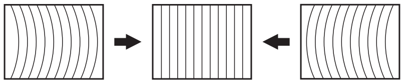
15. LANG (L-ANGLE)



16. VBOW (AFC-BOW)



17. LBOW (L-BOW)



2-9.2. 1080i HD MODE ADJUSTMENT

1. Input a 1080i cross-hatch signal and an HD monoscope signal that contains overscan markers.
2. Adjust the raster position per Section 2-8., only if this procedure was not performed for full mode.
3. Adjust the geometry similar to Full DRC mode. Vertical size is 11.7 ± 0.1 sq. and horizontal size is 15.6 ± 0.1 sq., if monoscope signal is available. Otherwise, set the Vertical size to 91.0 ± 0.6% scan and Horizontal size as 91.0 ± 0.6% scan.
4. Use the following register to adjust the horizontal parameter:

A2150-D2	01	HPOS

Note: If necessary, touch up the geometry using the data register listed above for Full mode.

5. Write the data into memory.

2-9.3. VERTICAL COMPRESSED MODE CHECK AND CONFIRMATION

1. Input a monoscope and crosshatch signal.
2. Check vertical compressed mode.

SECTION 3: SAFETY RELATED ADJUSTMENTS

3-1. RV8001, RV8002 CONFIRMATION METHOD AND HV SERVICE ADJUSTMENTS

3-2. B+ MAX CONFIRMATION

Standard .... 135.3 ± 1 VCD

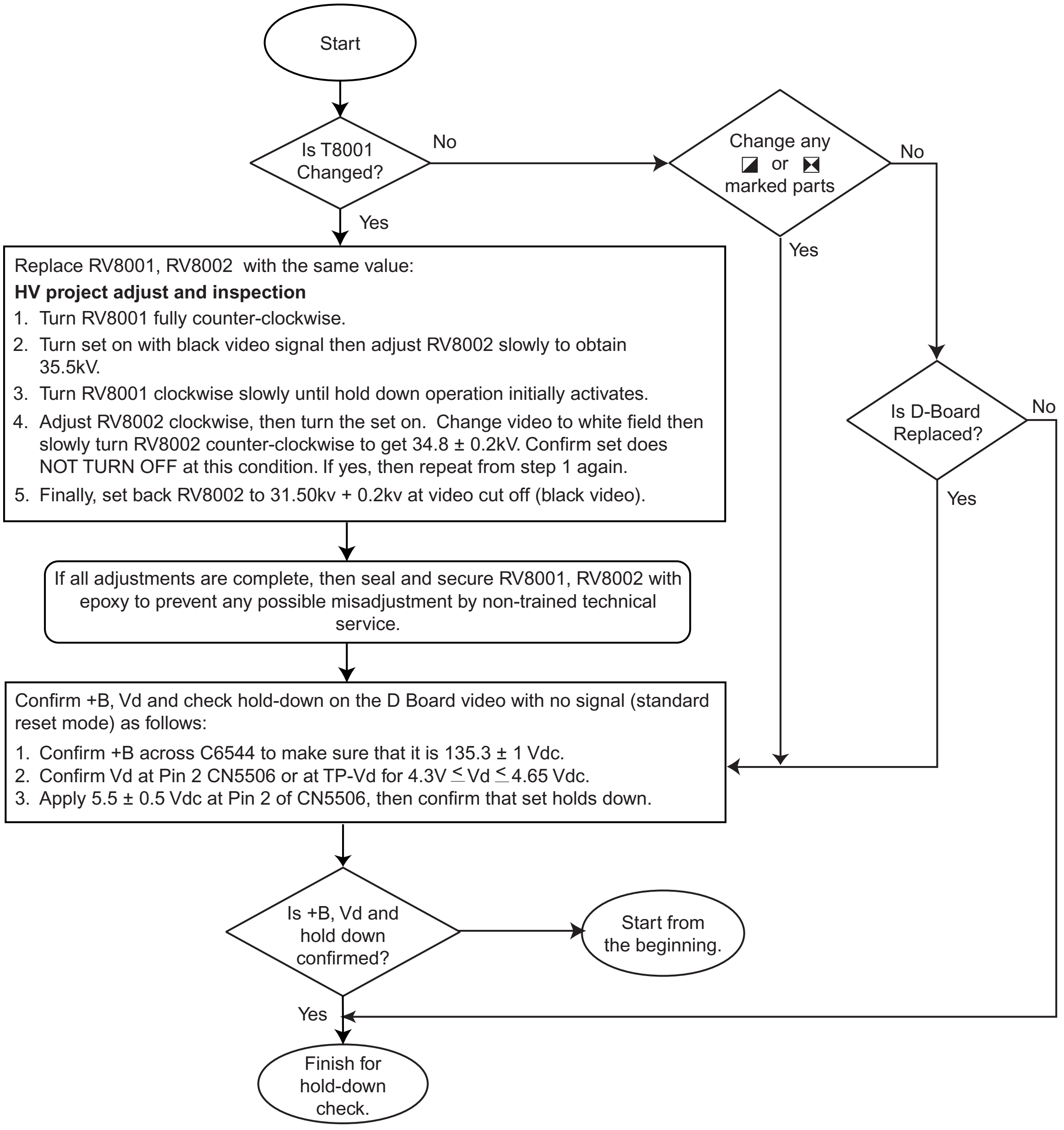
Check Condition:

AC input voltage: 120 (± 2) VAC at Board Adjustment Process
130 (± 2) VAC at QC
120 (± 2) VAC at Overall Adjustment (after aging)

Note: If using a stabilized power supply, make sure that the distortion factor is 3% or less.

Setting Mode: .... Full mode
Signal Input: .... Cross-hatch of NTSC at QC
Initial Setting: ....Reset condition at QC
Confirm Point: ....Across C6544 for B+ of D Board

3-3. HV SERVICE FLOWCHART



SECTION 4: CIRCUIT ADJUSTMENTS

ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

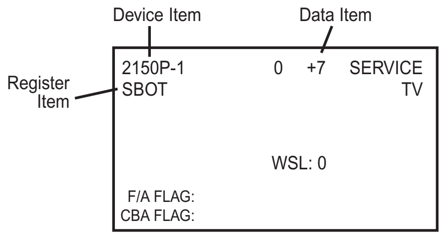
Use the Remote Commander (RM-Y184) to perform the circuit adjustments in this section.

Test Equipment Required: 1. Pattern generator 2. Frequency counter 3. Digital multimeter 4. Audio oscillator

4-1. SETTING THE SERVICE ADJUSTMENT MODE

1. Standby mode (Power off).
2. Press the following buttons on the Remote Commander within one second of each other:
   DISPLAY → Channel 5 → Sound Volume + → Power

SERVICE ADJUSTMENT MODE VIEW



READING THE MEMORY

1. Enter into Service Mode.
2. Press 0 on the Remote Commander.
3. Press ENTER to read memory.

ADJUSTING THE PICTURE

1. Enter into Service Mode
2. Press 2 or 5 on the remote to select the device item.
3. Press 1 or 4 on the remote to select an item.
4. Press 3 or 6 on the remote to change the data.
5. Press MUTING then ENTER to write into memory.

4-1.1. RESETTING THE DATA

Note: Be careful when using the remote! It will clear and re-initialize ALL NVM data including deflection adjustment data if not reset properly as follows:

RESETTING THE DEFLECTION NVM DATA

1. Enter into Service Mode.
2. Press 7, then MENU, and then press ENTER on the remote.

RESETTING THE SYSTEM NVM DATA

1. Enter into Service Mode.
2. Press 7, then 9, and then press ENTER on the remote.

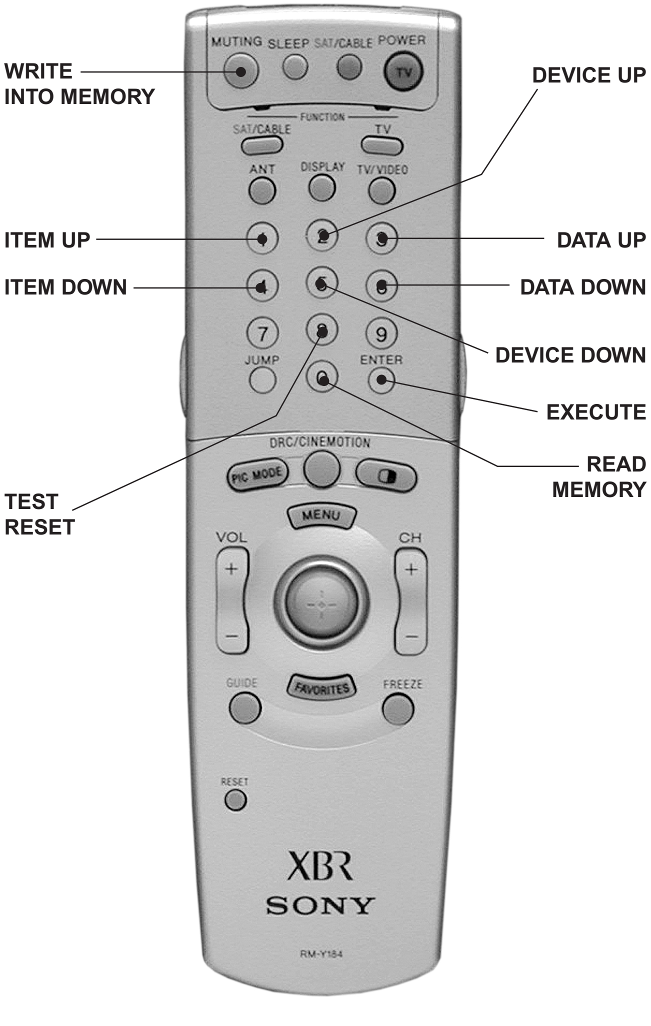
RESETTING THE SYSTEM NVM DATA

1. Enter into Service Mode.
2. Press 8 and then press ENTER on the remote.

4-2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, pull out the plug from the AC outlet, then replace the plug in the AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again to confirm they were adjusted.

4-3. REMOTE ADJUSTMENT BUTTONS AND INDICATORS



RM-Y184

DX1A-2001* Service List ------ Contents & Notes

Category Number & Name		Device Name	Device Reference Number	Slave Address	Comment
# 1	**3D-COMB**	µPD64082	IC3501 / BC-board	B8h (W) & B9h (R)	W&R: Write & Read
# 2-1	**CXA2103-1 (Main)**	CXA2103Q	IC3048 (Main) / B-board	9Ah	
# 2-2	**CXA2103-2 (Sub)**		IC3110 (Sub) / B-board	9Eh	
# 3-1	**CXA2150P-1**	CXA2150Q	IC201 / A-board	86h	
# 3-2	**CXA2150P-2**				
# 3-3	**CXA2150P-3**				
# 3-4	**CXA2150P-4**				
# 4-1	**CXA2150D-1**	CXA2150Q	IC201 / A-board	86h	
# 4-2	**CXA2150D-2**				
# 4-3	**CXA2150D-3**				
# 5	**CXA2151**	CXA2151Q	IC3001 / B-board	84h	
# 6	**D-CONV**	CXA8070P	IC5513 / D-board	DEh	
# 7	**CXA2026**	CXA2026AS	IC5511 / D-board	8Eh	
# 8	**AP**	BH3868FS	IC7001 / A-board	82h	
# 9	**TRUS**	NJM2180M	IC4101 / S-board	2Eh	Controlled through CXA1315M (IC4103 / S-board / 48h)
# 10	**MID1**	CXD9509AQ	IC3408 / B-board	2Eh	Controlled through MID-XA Micro (IC3090 / B-board / 64h)
# 11	**MID2**	CXD9509AQ	IC3408 / B-board	2Eh	Controlled through MID-XA Micro (IC3090 / B-board / 64h)
# 12	**MID3**	CXD9509AQ	IC3408 / B-board	2Eh	Controlled through MID-XA Micro (IC3090 / B-board / 64h)
# 13	**MID5**	CXD9509AQ	IC3408 / B-board	2Eh	Controlled through MID-XA Micro (IC3090 / B-board / 64h)
# 14	**OSD**	M306V2ME-153FP	IC701 / A-board	60h	DX1A-2001 System Micro {V1.0}
# 15	**SNNR**	µPD64082	IC3501 / BC-board	B8h (W) & B9h (R)	
		CXA2103Q	IC3048 (Main) / B-board	9Ah	
		CXA2150Q	IC201 / A-board	86h	
# 16	**ID1**	CXD2085M	IC3603 / B-board	40h	
# 17	**CCD&VCHIP**	CXP85840A-039Q	IC3602 (Main) / B-board	68h (Main)	CCD&Vchip Micro (V2.14)
			IC3601 (Sub) / B-board	6Ch (Sub)	
# 18	**OP**	M306V2ME-153FP	IC701 / A-board	60h	DX1A-2001 System Micro {V1.0}
# 19	**ID**	M306V2ME-153FP	IC701 / A-board	60h	DX1A-2001 System Micro {V1.0}

DX1A-2001 System Micro & Notes for Services	M306V2ME-153FP (MASK), Software Version 1.0, IC701/A-board (Slave Adress: 60h) The system micro name, software&patch versions, and the status of NVM devices are displayed only when in the service catergory (#19): ID.
DX1A-2001 MID-XA Micro	MB94918RPF-G-137-BND (MASK), Software Version 12/08/00, IC3090/B-board (Slave Address: 64h)
DX1A-2001 CCD&Vchip Micros	CXP85840A-039Q (MASK), Software Version 2.14, IC3602/B-board (Main/Slave Address: 68h) & IC3601/B-board (Sub/Slave Address:

Note:
*** This service list is used for DX1A-2001 ONLY. Some service data is the same in DX1A-2001 & 2000, as noted in the data sheets.**

DX1A-2001&2000 SERVICE LIST (#1): 3D-COMB / mPD64082 (Part-1/4)

Device Name: mPD64082GF { 3D-Comb Filter / NEC } / IC3501 (BC-board) / P/N: 8-759-594-44 (SB#: V7372)
Slave Address: B8h (Write Address) / B9h (Read Address)

Register No	Register Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)				Comment
					UHF/VHF & CVideo		SVideo		CVideo (CV): CVideo1~4 inputs SVideo (SV): SVideo1~3 inputs C: Common data
					Standard	Non-standard	Standard	Non-standard	
0	NRMD	Operation mode setting		0~3	0	1	3	3	
1	YAPS	Y-output correction (V-aperture compensation & Y-peaking filtering)	C	0~3	3				
2	CLKS	System clock setting	C	0~3	1				
					UHF/VHF & CVideo		SVideo		
					Standard	Non-standard	Standard	Non-standard	
3	NSDS	Selection for standard/non-standard signal processing		0~3	0	0	0	0	
4	MSS	Selection for inter-frame/inter-line processing	C	0~3	0				
5	KILS	Killer processing selection	C	0~3	1				
6	CDL	C-signal phase with respect to the Y-signal (Fine adjustment at 70 ns/step)	C	0~7	3				
		NRMD Setting-based Control Table for DYCO, DYGA, DCCO, DCGA			NRMD = 0	NRMD = 1	NRMD = 2	NRMD = 3	
7	DYCO	DY detection coring level (Y motion detection coring)		0~15	2	2	2	2	
8	DYGA	DY detection gain (Y motion detection gain)		0~15	10	10	10	10	
9	DCCO	DC detection coring level (C motion detection coring)		0~15	5	5	5	5	
10	DCGA	DC detection gain (C motion detection gain)		0~15	5	5	5	5	
11	YNRL	Frame recersive YNR nonlinear filter limit level	C	0~3	1				
12	CNRL	Frame recersive CNR nonlinear filter limit level	C	0~3	1				
					UHF/VHF	Video1~4	Video5&6	Video1~4: CVideo1~4 & SVideo1~3 inputs Video5&6: YPbPr-480i/480p/1080i inputs	
13	VTRH	Hysteresis for Hsync non-standard signal detection (out-of-Hsync intra-field)		0~3	1	1	1		
14	VTRR	Sensitivity for Hsync non-standard signal detection (out-of-Hsync intra-field)		0~3	1	1	1		
15	LDSR	Sensitivity for frame non-standard signal detection (out-of-Hsync inter-frame)		0~3	2	2	2		
		VM&SNNR Setting-based Control Table for VAPG & VAPI VAPG= VAPG1 - VAPG2			VAPG1 Data Based on MENU/VM Setting				This setting continues to the next page.
					VM = Off	VM = Low	VM = Mid	VM = High	
16	VAPG	V-aperture compensation gain		0~7	0	2	3	4	
17	VAPI	V-aperture compensation convergence point		0~31	4	4	4	8	
		SNNR Setting-based Control Table for YPFT & YHFG				SNNR Setting (-Offset)			
						SNNR = 0	SNNR = 1	SNNR = 2	SNNR = 3
18	YPFT	Y peaking filter (BPF) center frequency		0~3	0	0	0	0	0
19	YPFG	Y peaking filter (BPF) gain		0~15	7	0	1	2	3

Note: The same 3D-COMB service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#1): 3D-COMB / mPD64082 (Part-2/4)

Register No & Name	Data Initial/Average Setting (32V&36V CRTs)				Comment
	VAPG2 Data Based on SNNR/Offset-setting				
	SNNR = 0	SNNR = 1	SNNR = 2	SNNR = 3	
#16 **VAPG (cont.)**	0	0	0	0	

Note: The same 3D-COMB service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#1): 3D-COMB / mPD64082 (Part-3/4)

Register No.	Register Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)				Comment
		SNNR Setting-based Control Table for YHCO & YHCG			SNNR = 0	SNNR = 1	SNNR = 2	SNNR = 3	(Not SNNR Offset Data YHCO&YHCG settings are sent directly to 3D-Comb
20	YHCO	Y output high frequency component coring		0~3	1	1	1	1	
21	YHCG	Y output high frequency component coring gain		0, 1	0	0	0	0	
22	HSSL	Hsync slice level	C	0~15	12	C: Common data			
23	VSSL	Vsync slice level	C	0~15	8				
24	ADCL	ADC clock delay	C	0~3	3				
		NRMD Setting-based Control Table for D2GA			NRMD = 0	NRMD = 1	NRMD = 2	NRMD = 3	
25	D2GA	Moving detection gain		0~7	4	4	4	4	
26	KILR	Killer detection reference	C	0~15	3				
27	OP1	Option1: Selection of comb filter & recursive noise reduction types	C	0, 1	1				
					UHF/VHF	CVideo1	SVideo1	This setting continues to the next page.	
28	NR1	Noise reduction on/off		0, 1	0	0	1		
29	NR2	SNNR control on/off	C	0, 1	0				
30	WSL	Noise level detection data		0~255	1 Byte Data from Read Register WSL				
31	HPLL	H-PLL filter (Must be set to 1 when MN signal is input.)	C	0, 1	1				
32	BPLL	Burst PLL filter	C	0, 1	1				
33	FSCF	Burst extraction gain	C	0, 1	0				
34	PLLF	PLL loop gain	C	0, 1	1				
					UHF/VHF	Video1~4	Video5&6	Video1~4: CVideo1~4 & SVideo1~3 inputs Video5&6: YPbPr-480i/480p/1080i	
35	CC3N	Selection of a line-comb filter C separation filter characteristic		0, 1	0	0	0		
36	HDP	Fine adjustment of the system H-phase	C	0~7	5				
37	BGPS	Internal burst gate start position {Gate Start Position from Hsync center = 0.25 x BGPS + 2 (ms)}	C	0~15	4				
38	BGPW	Internal burst gate width {Gate Width = 0.25 x BGPW + 0.5 (ms)}	C	0~15	10				
39	TEST	Test bit {0: Normal mode, 1: Test mode (forbidden setting	C	0, 1	0				
40	WSC	Amount of noise detection coring	C	0~3	1				
					UHF/VHF & Video1~4		Video5&6	This setting is used for non-standard signals such as Play Station signals.	
41	LIND	DRC-M line-doubling setting for non-standard signals	Micro	0~63	0		2		
42	PFGO	(YPFG offset at GR on) --- Not used for DX1A	---	0~7	3	(Not used for DX1A)			

Note: The same 3D-COMB service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#1): 3D-COMB / mPD64082 (Part-4/4)

Register No & Name	Data Initial/Average Setting (32V&36V CRTs)				Comment
	CVideo2	SVideo2	CVideo3	SVideo3	
#28 **NR1** (cont.)	0	1	0	1	

Note: The same 3D-COMB service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#2-1): CXA2103-1 {Main}

Device Name: CXA2103Q { NTSC-YCT (Chroma Decoder) / SONY } / IC3048 (B-board) / P/N: 8-752-089-50 (SBorSD#: NA)
Slave Address: 9Ah { Main }

Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial Setting & [Average Data] (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				Note
					UHF/VHF & Video		YPbPr-480i		Video: CVideo1~4 & SVideo1~3 Inputs P&P-Left (M)-1080i&480i: If P&P-Left is 1080i/480p signal, the signal from the main chroma decoder is sent to MID/VDO input. *: Settings not used				
					P&P-Left (M)-DRC	P&P-Left (M)-1080i	P&P-Left (M)-DRC	P&P-Left (M)-480i					
0	YLEV	Y-Out gain		0~63	23	27*	28	31*					
1	CLEV	Cb&Cr-Out gains		0~63	17	55*	32	31*					
					UHF/VHF		Video		Adj.: Adjusted data [Adj.-2steps]: The adjusted data - 2 steps				
2	SCON	Sub contrast	Adj.	0~15	7 [7]		7 [7]						
3	SCOL	Sub color	Adj.	0~15	7 [7]		7 [7]						
4	SHUE	Sub hue	Adj.	0~15	7 [Adj.-2steps]		7 [Adj.-2steps]						
5	YDLY	Y/C delay time		0~3	0		0						
		SNNR Data-related Settings			UHF/VHF	CVideo	SVideo	YPbPr 480i	SNNR=0 (-offset)	SNNR=1 (-offset)	SNNR=2 (-offset)	SNNR=3 (-offset)	
6	SHAP	Sharpness		0~15	6	4	4	4	0	1	2	3	
7	SHF0	Sharpness f0 selector		0~3	0	0	0	0	CVideo: CVideo1~4 Inputs SVideo: SVideo1~3 Inputs				
8	PREO	Sharpness pre/over-shoot ratio		0~3	3	0	0	0					
9	BPF0	Chroma band filter f0 setting		0~3	3	0	0	0					
10	BPFQ	Chroma band filter Q setting		0~3	0	3	3	3					
11	BPSW	Chroma band filter on/off		0, 1	1	0	0	0					
12	TRAP	Y bolck chroma trap filter on/off		0, 1	0	0	0	0					
13	LPF	YPbPr-Output LPF on/off		0, 1	0	0	0	0					
					UHF/VHF	Video	YPbPr 480i						
14	AFCG	AFC Loop Gain (PLL between Hsync & HVCO)		0, 1	1	0	0						
15	CDMD	V countdown system mode selector		0~3	3	3	3						
16	SSMD	H&Vsync slide level setting		0~3	0	0	0						
17	HMSK	Masking of macrovision signal on/off		0, 1	1	1	1						
18	HALI	H automatic adjustment on/off		0, 1	0	0	0						
19	PPHA	H TIM phase adjustment for video		0~15	7	7	7						
					UHF/VHF & Video		YPbPr-480i						
					P&P-Left (M)-DRC	P&P-Left (M)-1080i	P&P-Left (M)-DRC	P&P-Left (M)-480i					
20	CBOF	Cb-Offset1 of Cb IN (Pin34) Cb-Offset2 of EXT Cb (Pin38)		0~(31)~63	31	31*	31	31*	*: Settings not used (31): The center setting = 31				
21	CROF	Cr-Offset1 of Cr IN (Pin35) Cr-Offset2 of EXT Cr (Pin39)		0~(31)~63	31	31*	31	31*					
	CXA2150P-4/#13 UBLK Setting-related Controls for ATPD & DCTR				P&P & Favorite				P&P & Favorite				Single
					UBLK = 0	UBLK = 1	UBLK = 2	UBLK = 3	UBLK = 4	UBLK = 5	UBLK = 6	UBLK = 7	UBLK = 0~7
22	ATPD	Auto-pedestal Inflection Point		0~3	0	1	2	3	1	2	3	2	0
23	DCTR	DC Transmission Ratio		0~3	0	1	1	1	2	2	2	3	0

Note: The same CXA2103 service data (Main&Sub) is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#2-2): CXA2103-2 {Sub}

Device Name: CXA2103Q { NTSC-YCT (Chroma Decoder) / SONY } / IC3110 (B-board) / P/N: 8-752-089-50 (SBorSD#: NA)
Slave Address: 9Eh { Sub }

Register No	& Name	Control Register Function & Link	Data Type	Data Range	Data Initial Setting & [Average Data] (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				Note
					UHF/VHF & Video				Video: CVideo1~4 & SVideo1~3 Inputs P&P-Right (S)-DRC: If P&P-Left is 1080i/480p signal, the signal from the sub chroma decoder is switched to DRC path.				
					P&P-Right (S)	P&P-Right (S)-DRC							
0	YLEV	Y-Out gain		0~63	23	22							
1	CLEV	Cb&Cr-Out gains		0~63	18	16							
					UHF/VHF		Video		Adj.: Adjusted data [Adj.-2steps]: The adjusted data - 2 steps				
2	SCON	Sub contrast	Adj.	0~15	7 [7]		7 [7]						
3	SCOL	Sub color	Adj.	0~15	7 [7]		7 [7]						
4	SHUE	Sub hue	Adj.	0~15	7 [Adj.-2steps]		7 [Adj.-2steps]						
5	YDLY	Y/C delay time		0~3	0		0						
		SNNR Data-related Settings			UHF/VHF	CVideo	SVideo		SNNR=0 (-offset)	SNNR=1 (-offset)	SNNR=2 (-offset)	SNNR=3 (-offset)	
6	SHAP	Sharpness		0~15	6	4	4		0	1	2	3	
7	SHF0	Sharpness f0 selector		0~3	0	0	0		CVideo: CVideo1~4 Inputs SVideo: SVideo1~3 Inputs				
8	PREO	Sharpness pre/over-shoot ratio		0~3	3	0	0						
9	BPF0	Chroma band filter f0 setting		0~3	0	0	0						
10	BPFQ	Chroma band filter Q setting		0~3	0	0	0						
11	BPSW	Chroma band filter on/off		0, 1	0	0	0						
12	TRAP	Y bolck chroma trap filter on/off		0, 1	0	0	0						
13	LPF	YPbPr-Output LPF on/off		0, 1	0	0	0						
					UHF/VHF	Video							
14	AFCG	AFC Loop Gain		0, 1	1	0							
15	CDMD	V countdown system mode selector		0~3	3	3							
16	SSMD	H&Vsync slide level setting		0~3	0	0							
17	HMSK	Masking of macrovision signal on/off		0, 1	1	1							
18	HALI	H automatic adjustment on/off		0, 1	0	0							
19	PPHA	H TIM phase adjustment for video		0~15	7	7							
					UHF/VHF & CVideo		YPbPr-480i						
					P&P-Right (S)	P&P-Right (S)-DRC	P&P-Right (S)	P&P-Right (S)-DRC					
20	CBOF	Cb-Offset1 of Cb IN (Pin34) Cb-Offset2 of EXT Cb (Pin38)		0~(31)~63	31	31	31*	31*	*: Settings not used (31): The center setting = 31				
21	CROF	Cr-Offset1 of Cr IN (Pin35) Cr-Offset2 of EXT Cr (Pin39)		0~(31)~63	31	31	31*	31*					
	CXA2150P-4/#13 UBLK Setting-related Controls for ATPD & DCTR				P&P & Favorite				P&P & Favorite				Single
					UBLK = 0	UBLK = 1	UBLK = 2	UBLK = 3	UBLK = 4	UBLK = 5	UBLK = 6	UBLK = 7	UBLK = 0~7
22	ATPD	Auto-pedestal Inflection Point		0~3	0	1	2	3	1	2	3	2	0
23	DCTR	DC Transmission Ratio		0~3	0	1	1	1	2	2	2	3	0

Note: The same CXA2103 service data (Main&Sub) is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#3-1): CXA2150P-1 {Picture Controls: P1}

Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)
Slave Address: 86h

Register No	Register Name	Control Register Function & Link	Data Type	Data Range	Data Initial Settings & [Average Data] (32V&36V CRTs)							Comment
					UHF VHF	CV	SV	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	CV: CVideo1~4 SV: SVideo1~3 ( ): Settings at center
0	SBOT	Offset for SBRT		0~(7)~15	7	7	7	7	7	7	7	
1	YOF	Y_OFFSET: DC-offset for Y signal		0~(7)~15	0	0	0	0	0	0	0	
2	CBOF	CB_OFFSET: DC-offset for Cb signal		0~(31)~63	31	31	31	33	30	31	13	
3	CROF	CR_OFFSET: DC-offset for Cr signal		0~(31)~63	31	31	31	42	36	31	23	
4	SBRT	SUB_BRIGHT: Sub Bright	Adj.	0~63	24 [24]							Adj.: Adjusted data C: Common data Initial Setting = [Avg. Data]
5	RDRV	R_DRIVE: R output drive	C	0~63	41							
6	GDRV	G_DRIVE: G output drive	Adj.	0~63	36 [36]							
7	BDRV	B_DRIVE: B output drive	Adj.	0~63	33 [33]							
8	RCUT	R_CUTOFF: R output cutoff	C	0~63	41							
9	GCUT	G_CUTOFF: G output cutoff	Adj.	0~63	11 [11]							
10	BCUT	B_CUTOFF: B output cutoff	Adj.	0~63	22 [22]							
					Vivid		Standard		Movie		Pro	
11	WBSW	WB_SW: White balance offset on/off (Related to UTMP settings)		0, 1	0 (Cool)		0 (Neutral)		1 (Warm)		0	
12	SBOF	Offset for SBRT		0~(63)~127	63		63		63		63	
13	RDOF	Offset for RDRV		0~(63)~127	63		63		63**		63	**: The color temperature offset data
14	GDOF	Offset for GDRV		0~(63)~127	63		63		66**		63	
15	BDOF	Offset for BDRV		0~(63)~127	63		63		76**		63	
16	RCOF	Offset for RCUT		0~(63)~127	63		63		63**		63	
17	GCOF	Offset for GCUT		0~(63)~127	63		63		66**		63	
18	BCOF	Offset for BCUT		0~(63)~127	63		63		78**		63	

Note:
The same CXA2150 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#3-2): CXA2150P-2 {Picture Controls: P2}

Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)
Slave Address: 86h

Register No	Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)					Comment
0	**ALBK**	PIC_ON: RGB output including AKB reference pulse on/off (Setting = 0 for power on reset) --- G2 adjustment register setting	C	0, 1	1					C: Common data
1	**RGBS**	R_ON/G_ON/B_ON: R/G/B outputs on/off (AKB reference pusle can not be turned on/off.) (0,1/0,1/0,1)	C	0~7	7					
2	**BLKB**	BLK_BTM: RGB output bottom limit level (Black Limit) (AKB reference pusle DC-voltage)	C	0~3	3					
3	**LIML**	PLIMIT_LEV: Threshold level for excessively high inputs (White Limit	C	0~3	0					
4	**PABL**	P_ABL: DC-level in RGB output detection for PEAK ABL	C	0~15	15					
5	**SABL**	S_ABL: S_ABL gain	C	0~3	0					
6	**AGNG**	AGING_W/AGING_B: AGING_W/AGING_B modes on/off (Set luminance to 80/01IRE flat-field signal.)	C	0~3 (0,1/0,1)	0					
7	**AKBO**	AKBOFF: Automatic/Manual-Cutoff setting	C	0, 1	0					
					U/VHF & Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	Video1~4: CVideo1~4 & SVideo1~3
8	**SYPH**	SYNC_PHASE: Hsync delay with respect to Video (100%: H-period)		0~3	0	0	0	0	0	
9	**CLPH**	CLP_PHASE: Internal clamp pulse phase (100%: H-period)		0~3	3	3	3	3	3	
10	**CLGA**	CLP_GATE: Switch for the gated internal clamp pulse with Hsync input		0, 1	0	0	0	0	0	
11	**JAXS**	JAXIS: Color axis switch		0, 1	0					
12	**BLKO**	BLKO: Blanking switch		0, 1	0					

Note:
The same CXA2150 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#3-3): CXA2150P-3 {Picture Controls: P3} (Part-1/3)

Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)
Slave Address: 86h

Register No	Register Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)							Comment
					Picture Mode: Vivid							
					UHF VHF	CV	SV	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	
0	**SYSM**	SYSTEM: Signal bandwidth setting		0~3	1	1	1	1	1	2	2	These settings continue to the next page. CV: CVideo1~4 SV: SVideo1~3 C: Common data ( ): Settings at center
1	**UVML**	VM_LEV: VM_OUT level	C	0~3	3							
2	**VMMO**	System Micro pin#40		0, 1	0	0	0	0	0	0	0	
3	**VMCR**	VM_COR: VM_OUT coring level		0~3	3	3	3	3	3	3	3	
4	**VMLM**	VM_LMT: VM_OUT limit level		0~3	3	3	3	3	3	3	3	
5	**VMF0**	VM_F0: VM_f0		0~3	2	2	2	2	2	2	2	
6	**VMDL**	VM_DLY: VM_OUT phase (defined by phase difference from R_OUT)		0~3	3	3	3	3	3	1	3	
7	**SHOF**	Offset for USHP = SHOF x 4		0~3	2	2	2	3	3	0	2	
8	**SHF0**	SHP_F0: Sharpness circuit f0		0, 1	1	1	1	1	1	0	1	
9	**PROV**	PRE/OVER: Y signal pre/over-shoot ratio		0~3	3	3	3	1	3	0	3	
10	**F1LV**	SHP_F1: Sharpness for higher f0 (4.2/5.6 MHz @ NORMAL mode)		0~3	0	3	3	3	3	3	3	
11	**CDSP**	SHP_CD: Sharpness in part of high color saturation		0~3	3	3	3	3	3	3	3	
12	**LTLV**	LTI_LEV: Luminance transient improvement (LTI)		0~3	3	3	3	3	3	3	3	
13	**LTMD**	LTI_MODE: LTI mode setting		0~3	0	0	0	0	0	0	1	
14	**CTLV**	CTI_LEV: Chrominance transient improvement (CTI)		0~3	0	0	0	0	0	2	0	
15	**CTMD**	CTI_MODE: CTI mode setting		0~3	0	0	0	0	0	0	0	
16	**UBOF**	Offset for UBRT (Picture clarity adjustment)		0~(7)~15	7	7	7	7	7	10	7	
17	**UCOF**	Offset for UCOL = UCOF x 2 (Picture clarity adjustment)		0~3	3	3	3	3	3	0	3	
18	**UHOF**	Offset for UHUE (Picture clarity adjustment)		0~3	0	0	0	0	0	0	0	
19	**MIDE**	MID enhancement setting		0~15	3	3	3	7	11	---	---	

Note:
The same CXA2150 service data are used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#3-3): CXA2150P-3 {Picture Controls: P3} (Part-2/3)

Register No & Name	Data Initial/Average Settings (32V&36V CRTs) Picture Mode: Standard							Data Initial/Average Settings (32V&36V CRTs) Picture Mode: Movie							Data Initial/Average Settings (32V&36V CRTs) Picture Mode: Pro							Note
	UHF VHF	CV	SV	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	UHF VHF	CV	SV	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	UHF VHF	CV	SV	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	
#0 **SYSM (cont.)**	1	1	1	1	1	2	2	1	1	1	1	1	2	2	1	1	1	1	1	2	2	
#1 **UVML (cont.)**	3							0							0							
#2 **VMMO (cont.)**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
#3 **VMCR (cont.)**	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
#4 **VMLM (cont.)**	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
#5 **VMF0 (cont.)**	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
#6 **VMDL (cont.)**	1	3	3	3	3	1	3	1	1	1	1	1	1	3	1	1	1	1	1	1	3	
#7 **SHOF (cont.)**	0	3	3	3	3	0	2	0	3	3	3	3	0	3	0	3	3	3	3	0	3	
#8 **SHF0 (cont.)**	0	1	1	1	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
#9 **PROV (cont.)**	3	3	3	1	3	0	3	3	3	3	1	3	0	3	3	3	3	1	3	0	3	See next page
#10 **F1LV (cont.)**	0	3	3	3	3	3	3	0	0	0	0	0	0	3	0	0	0	0	0	0	3	
#11 **CDSP (cont.)**	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
#12 **LTLV (cont.)**	2	2	2	2	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
#13 **LTMD (cont.)**	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0	0	1	
#14 **CTLV (cont.)**	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
#15 **CTMD (cont.)**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
#16 **UBOF (cont.)**	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
#17 **UCOF (cont.)**	3	3	3	3	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
#18 **UHOF (cont.)**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
#19 **MIDE (cont.)**	2	2	2	6	10	---	---	1	1	1	5	9	---	---	0	0	0	4	8	---	---	

DX1A-2001&2000 SERVICE LIST (#3-3): CXA2150P-3 {Picture Controls: P3} (Part-3/3)

Register No & Name	Data Initial/Average Settings (32V&36V CRTs)								Comment
	SNNR=0 (Offset)	SNNR=1 (Offset)	SNNR=2 (Offset)	SNNR=3 (Offset)					
#1 **UVML (cont.)**	0	0	0	0					
#3 **VMCR (cont.)**	0	+ 1	+ 2	+ 3					
#10 **F1LV (cont.)**	0	- 1	- 2	- 3					
#11 **CDSP (cont.)**	0	0	0	0					
#12 **LTLV (cont.)**	0	0	0	0					
#14 **CTLV (cont.)**	0	0	0	0					
#19 **MIDE (cont.)**	0	0	0	0					

Note:
The same CXA2150 service data are used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#3-4): CXA2150P-4 {Picture Controls: P4} (Part-1/4)

Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA) **Slave Address: 86h**

Device Name: CXD2085M { ID-1 Decoder / SONY } / IC3603 (B-board) / P/N: 8-752-395-13 (SD#: S98511B) **Slave Address: 40h**

Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)							Comment
					Vivid		Standard		Movie		Pro	Settings for 36V CRTs are used for initial settings.
					32V	36V	32V	36V	32&36V			
0	UPIC	PICTURE: Picture		0~63	63	63	42	46	31		31	
1	UBRT	BRIGHT: Brightness		0~63	25	22	28	26	28		31	
2	UCOL	COLOR: Color		0~63	34	38	33	33	33		31	
3	UHUE	HUE: Hue		0~63	31	31	31	31	31		31	
		SNNR Setting-related Controls for USHP										This setting continues to the next page.
4	USHP	SHARPNESS: Sharpness		0~63	38	42	44	48	34		31	
5	UTMP	Color Temperature (0: Warm, 1: Neutral, 2: Cool)		0~2	2	2	1	1	0		1	
6	UDCL	DCOL: Dynamic color setting		0~3	2	2	2	2	2		0	
					Picture Mode: Vivid / Standard / Movie							These settings continue to the next page. Video1~4: CVideo1~4 & SVideo1~3
					UHF/VHF Video1~4		YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P		
7	AXIS	COL_AXIS: Color matrix setting		0~3	3		3	3	3	3		
					Picture Mode: Vivid							
					UHF/VHF Video1~4		YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P		
8	UGAM	GAMMA/GAMMA_L: RGB output GAMMA correction setting ($B_{7\sim6}$) GAMMA_L: Slight GAMMA correction on/off (B_0)		0~7 (0~3/0,1)	5		5	5	5	5		
9	AGAM	GAMMA/GAMMA_L (Av Pro user control) --- Void Data		0~7 (0~3/0,1)	---							
		UGAM Setting-related Controls for GSBO, GCOO, GHUO			UGAM = 7	UGAM = 6	UGAM = 5	UGAM = 4	UGAM = 3	UGAM = 2	UGAM = 1	These settings continue to the next page.
10	GSBO	Offset for SBRT (8 types of GSBO data based on UGAM values)		0~3	0	0	0	0	0	0	0	
11	GCOO	Offset for UCOL		0~3	0	0	0	0	0	0	0	
12	GHUO	Offset for UHUE		0~3	0	0	0	0	0	0	0	
					Picture Mode: Vivid							
					UHF/VHF Video1~4		YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P		
13	UBLK	Item # 15~18 pack FI data controls		0~7	7		7	7	7	7		
14	ABLK	(Av Pro user control) --- Void Data	---	0~7	0 (Void data)							
		UBLK Setting-related Controls for DCTR										These settings continue to the next page. ( ): Settings at center
15	DCTR	DC_TRAN: Y signal DC transmission (8 types of DCTR data based on UBLK values)		0~3	3		3	3	3	2		
16	DPIC	DPIC_LEV: Y signal AUTO PEDESTAL level		0~3	2		2	2	2	1		
17	DSBO	Offset for SBRT		0~(7)~15	7		7	7	7	7		
18	ABLM	ABL_MODE: ABL mode		0~3	1		1	1	1	1		

Note:
The same CXA2150 service data are used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#3-4): CXA2150P-4 {Picture Controls: P4} (Part-2/4)

Register No & Name	Data Initial/Average Settings (32V&36V CRTs)					Data Initial/Average Settings (32V&36V CRTs)					Data Initial/Average Settings (32V&36V CRTs)					Note
SNNR Setting (-Offset)	SNNR = 0	SNNR = 1	SNNR = 2	SNNR = 3												
#4 **USHP (cont.)**	0	1	3	4												
	Picture Mode: Pro															
	UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P											
#7 **AXIS (Cont.)**	3	3	3	3	3											
	Picture Mode: Standard					Picture Mode: Movie					Picture Mode: Pro					
	U/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	U/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	U/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	
#8 **UGAM (Cont.)**	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	
	UGAM = 0															
#10 **GSBO (cont.)**	0															
#11 **GCOO (cont.)**	0															
#12 **GHUO (cont.)**	0															
	Picture Mode: Standard					Picture Mode: Movie					Picture Mode: Pro					
	UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	
#13 **UBLK (Cont.)**	4	4	4	4	4	1	1	1	1	1	0	0	0	0	0	
#15 **DCTR (Cont.)**	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	See next pages
#16 **DPIC (Cont.)**	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	
#17 **DSBO (Cont.)**	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
#18 **ABLM (Cont.)**	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	

Note:
The same CXA2150 service data are used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#3-4): CXA2150P-4 {Picture Controls: P4} (Part-3/4)

Register No & Name	Data Initial/Average Settings (32V&36V CRTs)								Comment
	UBLK = 7	UBLK = 6	UBLK = 5	UBLK = 4	UBLK = 3	UBLK = 2	UBLK = 1	UBLK = 0	
#15 **DCTR (Cont.)**	3	2	2	2	1	1	1	1	
#16 **DPIC (Cont.)**	2	3	2	1	3	2	1	0	
#17 **DSBO (Cont.)**	7	7	7	7	7	7	7	7	
#18 **ABLM (Cont.)**	1	0	0	1	0	0	0	0	

Note:
The same CXA2150 service data are used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#3-4): CXA2150P-4 {Picture Controls: P4} (Part-4/4)

Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)					Comment
19	**ABLT**	ABL_TH: ABL correct detection Vth control		0~15	0					
					Full	Vcomp1		Vcomp2		Full: 480p/960i (4x3) Vcomp1: 480p/960i (16x9) Vcomp2: 1080i (16x9) ( ): Settings at center C: Common data
20	**ABLC**	Control of CXA2026 {0Ch -- DAC0} (*)		0~255	0	66				
21	**EPOF**	Offset for UPIC = EPOF x (UPIC/63) (for power save) --- Void Data	---	0~31						
		ID-1 and P&P Modes								
22	**SPOF**	Offset for UPIC = SPOF x (UPIC/64) --- Data Not Used	---	0~31	0 (Not used)					
					UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	
23	**SCON**	SUB_CONTRAST: SUB PICTURE		0~15	9	8	11	10	9	
24	**CLOF**	Offset for UCOL		0~(7)~15	8	8	9	7	8	
25	**HUOF**	Offset for UHUE		0~7~15	4	3	3	3	4	
		CXD2085 Service Controls								
26	**IDSW**	Switch for activating the selection in #27 DATA	C	0, 1	0					
					Full	Vcomp1		Vcomp2		
27	**DATA**	Selection of geometry-forced vertical compression modes	C	0~3	0	1		2		

Note:
The same CXA2150 service data are used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#4-1): CXA2150D-1 {Deflection Controls: D1}

Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)
Slave Address: 86h

Register No	& Name	Control Register Function & Link	Data Type	Data Range	Data Initial Settings & [Average Data] (32V&36V CRTs)			Comment
					Full	Vcomp1	Vcomp2	
0	**VPOS**	V_POSITION: Vertical position (V_DRV siganl DC-bias)	Adj.	0~(31)~63	26 [26]			Full: 480p/960i (4x3) display Vcomp1: 480p/960i (16x9) display Vcomp2: 1080i (16x9) display Adj.: Adjusted data ( ): Settings at center
1	**VSIZ**	V_SIZE: Vertical size (V_DRV signal gain)	Adj.	0~(31)~63	19 [19]			
2	**VLIN**	V_LINEARITY: Vertical linearity (Gain for V_DRV signal secondary component)	Adj.	0~(7)~15	9 [9]			
3	**VSCO**	S_CORRECTION: Vertical S-correction	Adj.	0~(7)~15	8 [8]			
4	**VCEN**	VSAW0_DCH/VSAW0_DCL: Vertical center adjustment VSAW0_DCH: VSAW0 waveform DC component (high 2-bits) VSAW0_DCL: VSAW0 waveform DC component (low 4-bits)	Adj.	0~(31)~63	31 [31]			VCEN-L(Low bit) VCEN-H(High bit)
5	**VPIN**	VSAW0_AMP: Vertical PIN adjustment VSAW0 waveform SAW component amplitude	Adj.	0~(15)~31	15 [15]	15 [Copty1]		[Copy1]: Copy the adjusted data for Full mode.
6	**NSCO**	VSAW1_DC: Rotation	Adj.	0~(7)~15	7 [7]			Either 7 or 8 can be used as the average NSCO data. (If both of them are not good, please feedback to / check with the DY attachment process.)
7	**HTPZ**	VSAW1_AMP: Horizontal trapezoid	Adj.	0~(15)~31	15 [15]			
8	**ZOOM**	ZOOM_SW: Zoom switch		0, 1	0	0		
9	**APSW**	ASP_SW: Aspect switch		0, 1	1	1	0	
10	**ASPT**	V_ASPECT: Aspect ratio	Adj.	0~63	47	47	47	
11	**SCRL**	V_SCROLL: Vertical scroll	Adj.	0~(31)~63	31	32	32	
12	**UVLN**	UP_VLIN: Upper vertical linearity		0~15	0	0		
13	**LVLN**	LO_VLIN: Lower vertical linearity		0~15	0	0		

Note:
The same CXA2150 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#4-2): CXA2150D-2 {Deflection Controls: D2}

Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)
Slave Address: 86h

Register No	Name	Control Register Function & Link	Data Type	Data Range	Data Initial Settings & [Average Data] (32V&36V CRTs) Full	Vcomp1	Vcomp2	Comment
					Full	Vcomp1	Vcomp2	Full: 480p/960i (4x3) display Vcomp1: 480p/960i (16x9) display Vcomp2: 1080i (16x9) display ( ): Settings at center Adj.: Adjusted data [Adj.-6steps]: The adj. data for Vcomp2 mode = The adj. data for Full/Vcomp1 modes - 6 steps
0	HCNT	HC_PARA_DC: Horizontal center	Adj.	0~(31)~63	31 [31]			
1	HPOS	H_POSITION: Horizontal position	Adj.	0~(31)~63	31 [31]		31 [Adj.-6steps]	
2	HSIZ	H_SIZE: Horizontal size	Adj.	0~(31)~63	45 [45]			
3	SLIN	MP_PARA_DC: Horizontal S-correction	Adj.	0~15	3 [3]			
4	MPIN	MP_PARA_AMP: Horizontal middle pin		0~15	7			
5	PIN	PIN_AMP: Horizontal pin	Adj.	0~(31)~63	35 [35]			
6	UCP	UP_CPIN: Upper corner pin	Adj.	0~(31)~63	38 [38]			
7	LCP	LO_CPIN: Lower corner pin	Adj.	0~(31)~63	42 [42]			
8	UXCG	UP_UCG: Upper extra corner pin gain		0~3	1			Data (32Vor36V): The data for 36V are used as the Initial & CBA data. From the system micro (V 2.0), the deflection control-related initial settings are the same as their average data.
9	LXCG	LO_UCG: Lower extra corner pin gain		0~3	2			
10	UXCP	UP_UCP: Upper extra corner pin position		0~3	2			
11	LXCP	LO_UCP: Lower extra corner pin postion		0~3	2			
12	XCPP	UC_POL: Extra corner pin polarity		0, 1	0			
13	PPHA	PIN_PHASE: Pin phase	Adj.	0~(31)~63	15 [15]			
14	VANG	AFC_ANGLE: AFC angle	Adj.	0~(31)~63	31 [31]			
15	LANG	HC_PARA_PHASE: Linearity angle	Adj.	0~(31)~63	31 [31]			
16	VBOW	AFC_BOW: AFC bow	Adj.	0~(31)~63	31 [31]			
17	LBOW	HC_PARA_AMP: Linearity bow	Adj.	0~(31)~63	31 [31]			
18	CPY1	Copy Function 1: (Set CPY1=1, then press MUTE + Enter.) Copy all CXA2150D-2 data for Full mode to Vcomp1&2	Micro	0, 1	0			For engineering design use only

Note:
The same CXA2150 service data is used for DX1A-2001&2000.

<table>
<tr><th colspan="8">DX1A-2001&2000 SERVICE LIST (#4-3): CXA2150D-3 {Deflection Controls: D3}</th></tr>
<tr><td colspan="8">Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)
Slave Address: 86h</td></tr>
<tr><th>Register No & Name</th><th>Control Register Function & Link</th><th>Data Type</th><th>Data Range</th><th colspan="3">Data Initial/Average Settings (32V&36V CRTs)</th><th>Comment</th></tr>
<tr><td></td><td></td><td></td><td></td><td>Full</td><td>Vcomp1</td><td>Vcomp2</td><td rowspan="3"><u>Full</u>: 480p/960i (4x3) display
<u>Vcomp1</u>: 480p/960i (16x9) display
<u>Vcomp2</u>: 1080i (16x9) display</td></tr>
<tr><td>0 HBLK</td><td>HBLK_SW: Horizontal blanking switch</td><td></td><td>0, 1</td><td colspan="3">1</td></tr>
<tr><td>1 LBLK</td><td>LEFT_BLK: Left blanking</td><td></td><td>0~63</td><td colspan="2">45</td><td>50</td></tr>
<tr><td>2 RBLK</td><td>RIGHT_BLK: Right blanking</td><td></td><td>0~63</td><td colspan="2">24</td><td>27</td><td></td></tr>
<tr><td>3 VBLK</td><td>VBLK_SW: Vertical blanking switch</td><td></td><td>0, 1</td><td>1</td><td colspan="2">1</td><td></td></tr>
<tr><td>4 TBLK</td><td>UP_BLK: Top blanking</td><td></td><td>0~(7)~15</td><td>1</td><td>8</td><td>12</td><td>( ): Settings at center</td></tr>
<tr><td>5 BBLK</td><td>LO_BLK: Bottom blanking</td><td></td><td>0~(7)~15</td><td>0</td><td>13</td><td>13</td><td></td></tr>
<tr><td>6 VCMP</td><td>V_COMP: Vertical compensation</td><td></td><td>0~15</td><td>0</td><td>0</td><td>0</td><td></td></tr>
<tr><td>7 HCMP</td><td>H_COMP: Horizontal compensation</td><td></td><td>0~15</td><td>0</td><td colspan="2">0</td><td></td></tr>
<tr><td>8 ACMP</td><td>AFC_COMP: AFC compensation</td><td></td><td>0~7</td><td>0</td><td colspan="2">0</td><td></td></tr>
<tr><td>9 PCMP</td><td>PIN_COMP: Pin compensation</td><td></td><td>0~7</td><td>0</td><td colspan="2">0</td><td></td></tr>
<tr><td>10 AFCM</td><td>AFC_MODE: AFC loop gain</td><td></td><td>0~3</td><td colspan="2">3</td><td>2</td><td></td></tr>
<tr><td>11 VFRQ</td><td>V_FREQ: Vertical frequency</td><td></td><td>0~3</td><td colspan="3">1</td><td></td></tr>
<tr><td>12 VON</td><td>V_ON: Vertical drive on</td><td></td><td>0, 1</td><td colspan="3">1</td><td></td></tr>
<tr><td>13 JUMP</td><td>JMP_SW: Reference pulse jump swtich</td><td></td><td>0, 1</td><td>0</td><td colspan="2">1</td><td></td></tr>
<tr><td>14 VDJP</td><td>VDRV_SW: Vertical drive jump switch</td><td></td><td>0, 1</td><td>0</td><td>0</td><td>1</td><td></td></tr>
<tr><td>15 VDST</td><td>RST_SW: Vertical drive start switch</td><td></td><td>0, 1</td><td>0</td><td>0</td><td>1</td><td></td></tr>
<tr><td>16 EWDC</td><td>EW_DC: Pin DC level shift</td><td></td><td>0, 1</td><td>0</td><td colspan="2">0</td><td></td></tr>
<tr><td>17 AKBT</td><td>AKBTIM: AKB timing</td><td></td><td>0~31</td><td>20</td><td>20</td><td>10</td><td></td></tr>
<tr><td colspan="8">Note:
The same CXA2150 service data is used for DX1A-2001&2000.</td></tr>
</table>

DX1A-2001&2000 SERVICE LIST (#5): CXA2151Q

Device Name: CXA2151Q { Component I/F & Sync Separation / SONY } / IC3001 (B-board) / P/N: 8-752-093-84 (SD#: S00302B)
Slave Address: 84h

Register No	Register Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)			Comment
					480i (15.75 KHz)	480p (31.50 KHz)	1080i (33.75 KHz)	Video5&6: YPbPr-480i/480p/1080i inputs Sub: 480i input from the sub-channel Full: 480p/960i (4x3) display Vcomp1: 480p/960i (16x9) display Vcomp2: 1080i (16x9) display C: Common data
0	**MTRX**	MAT_OUT: Selection of color matrix conversion types	Micro	0~3	0	0	1	
1	**GAIN**	GAIN_SEL: Selection of output signals for SELYOUT, SELCBOUT, SELCROUT	C	0~3	0			
2	**CBGN**	YGAIN, CBGAIN, CRGAIN: The gain control of SELYOUT, SELCBOUT, & SELCROUT	C	0~15	9			
3	**VTC**	V_TC: Setting of Vsync separation time constant	C	0~3	1			
4	**HWID**	H_WIDTH: Setting of the output pulsewidth of SELHOUT	C	0~3	1			
					Video5	Video6	Sub	
5	**HSEP**	HSEP_SEL: Setting for the sync separation system		0, 1	0	0	0	
6	**TEST**	TEST: Test mode selection (for device tests)	C	0, 1	0			
7	**FRGB**	The forced RGB selection (for tests) {0: MAT_OUT = MTRX (#0), 1: MAT_OUT = MTRX (#3)}	C	0, 1	0			
					Full	Vcomp1	Vcomp2	
8	**HMSK**	Hsync masking in vertical retrace		0, 1	1		0	

Note:
The same CXA2151 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#6): D-CONV / CXA8070

Device Name: CXA8070AP { DY-Convergence Control / SONY } / IC5513 (D-board) / P/N: 8-759-595-52 (SB#: V1718)
Slave Address: DEh

Register No	Register Name	Control Register Function & Link	Data Type	Data Range	Data Initial Settings & [Average Data] (32V&36V CRTs) Full	Vcomp1	Vcomp2	Comment
0	SBHS	DC AMP3: DC shift	Adj.	0~63	31 [31]	31 [31]		Full: 480p/960i (4x3) display mode Vcomp1: 480p/960i (16x9) display mode Vcomp2: 1080i (16x9) display mode Adj.: Adjusted data From the system micro (V 2.0), the deflection control-related initial settings are the same as their average data.
1	YBWU	VCA9: Upper Y-bow	Adj.	0~63	31 [31]	31 [31]		
2	YBWL	VCA10: Lower Y-bow	Adj.	0~63	31 [31]	31 [31]		
3	RSAP	DC AMP2: Right H-AMP	Adj.	0~63	31 [31]	31 [31]		
4	RUBW	VCA5: Right upper bow	Adj.	0~63	31 [31]	31 [31]		
5	RLBW	VCA6: Right lower bow	Adj.	0~63	31 [31]	31 [31]		
6	LSAP	DC AMP1: Left H-AMP	Adj.	0~63	31 [31]	31 [31]		
7	LUBW	VCA1: Left upper bow	Adj.	0~63	31 [31]	31 [31]		
8	LLBW	VCA2: Left lower bow	Adj.	0~63	31 [31]	31 [31]		
9	CADJ	DC AMP4: Offset adjustment (ADJ)	Adj.	0~63	48 [48]			
10	CPY2	Copy Function 2: (Set CPY2=1, then press MUTE + Enter.)	Micro	0, 1	0			For engineering design use only

Note:
The same CXA8070 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#7): CXA2026AS

Device Name: CXA2026AS { DQP Control / SONY } / IC5511 (D-board) / P/N: 8-752-074-64 (SD#: S95610B)
Slave Address: 8Eh

Register No	Name	Control Register Function & Link	Data Type	Data Range	Data Initial Settings & [Average Data] (32V&36V CRTs) Full	Vcomp1	Vcomp2	Comment
0	**DFON**	SW0: DF on/off switch	C	0, 1	0			Full: 480p/960i (4x3) display mode Vcomp1: 480p/960i (16x9) display mode Vcomp2: 1080i (16x9) display mode C: Common data Adj.: Adjusted data
1	**DQP**	PWM: DQP phase	Adj.	0~63	23 [23]	23 [23]		
2	**DF**	DAC1: DF phase	Adj.	0~63	25 [25]	25 [25]		
3	**DQPD**	H.AMP: DQP dc-level	Adj.	0~63	34 [34]	34 [34]		
4	**QPDV**	U.CBOW, L.CBOW: DQP dc-level vertical modulation		0~63	51	47		U.CBOW = QPDV + DVS L.CBOW = QPDV - DVS
5	**DVS**	U.CBOW, L.CBOW: DQP dc-level tilt		0~(3)~7	0	0		
6	**QPDY**	U.MBH,L.MBH: DQP dc-level at top & bottom areas		0~63	7	7		( ): Settings at center
7	**DQPA**	DC SHIFT: DQP amplitude	Adj.	0~63	13 [15]	13 [15]	13 [15]	Data (36V) is used as Initial/CBA data. From the system micro (V 2.0), most deflection control-related initial settings are the same as their average data.
8	**QPAV**	U.YBOW, LYBOW: DQP amplitude vertical modulation		0~63	38	34		U.YBOW = QPAV + AVS L.YBOW = QPAV - AVS
9	**AVS**	U.YBOW, LYBOW: DQP amplitude tilt		0~7	3	3		
10	**NORM**	SW1:		0, 1	0	0		
11	**CPY3**	Copy Function 3: (Set CPY3=1, then press MUTE + Enter.)	Micro	0, 1	0			For engineering design use only
12	**200V**	H.DUTY, H.TILT: 200V regulator adjustment	Adj.	0~63	31 [31]			

Note:
The same CXA2026 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#8): Audio Processing (AP) / BH3868AFS

Device Name: BH3868AFS { Audio Processor / ROHM } / IC7001 (A-board) / P/N: 8-759-678-92 (SBorSD#: NA)
Slave Address: 82h

Register No	Register Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	**SVOL**	Volume: Offset for Volume		0~3	0	
1	**SBAL**	Balance: Offset for Balance		0~(3)~7	7	( ): Settings at center
2	**SBAS**	Bass: Offset for Bass		0~(3)~7	7	
3	**STRE**	Treble: Offset for Treble		0~(3)~7	7	
4	**BBLP**	BBE lowpass filter		0~15	0	
5	**BBHP**	BBE highpass filter		0~15	2	
6	**SREF**	Surround effect		0~7	11	
7	**AGC**	Auto gain control		0, 1	0	
8	**BBE**	BBE on/off		0, 1	1	

Note:
The same AP service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#9): TruSurround (TRUS) / NJM2180

Device Name: NJM2180M { TruSurround 3D-Audio Processor / JRC } / IC4101 (S-board) / P/N: 8-759-686-15 (SB#: V9072)
Device Control: Controlled via CXA1315M (Audio Control D/A, IC4103/S-board, Slave Address: 48h) / P/N: 8-752-059-23 (SD#: S88Z45B)

Register No	Register Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	**TS**	TruSurround effect selection		0~3	2	C: Common data
1	**DMY1**	Dummy data (No functions)	C	0~255	0	DMY1 is used to fulfil the minimum requirement of 2 control items in each service control category.

Note:
The same TRUS service data is used for DX1A-2001&2000.

DX1A-2001* SERVICE LIST (#10): MID1 (Common Data)

Device Name: CXD9509AQ { MID-XA / Fujitsu & SONY } / IC3408 (B-board) / P/N: 8-759-672-57 (SBorSD#: NA)
Slave Address: 2Eh { Controlled through MID-XA Micro (IC3090/B-board, Slave Address: 64h) / P/N: 6-800-050-01 (SB#: V4216) }
MID-XA Micro (MASK type): MB94918RPF-G-137-BND, **MID-XA Software:** Version 12/08/00, (P/N: 6-800-050-01)

Register No & Name		Control Register Function & Link	Register Name (Software)	Data Type	Data Range	Data Initial/Average Setting (32V/36V/40V CRTs)			Comment
						MID Mode: All (Single & P&P & Favorite)			
0	**DHPH**	Horizontal phase of the active display area	d_h_phase	C	0~255	91			C: Common data
1	**DVPH**	Vertical phase of the active display area	d_v_phase	C	0~63	20			
2	**DHAR**	Horizontal size of the active display area	d_h_area	C	0~255	240			
3	**DVAR**	Vertical size of the active display area	d_v_area	C	0~255	135			
4	**DHPW**	Horizontal pulse width	d_h_pwidth	C	0~63	27			
5	**DVPW**	Vertical pulse width	d_v_pwidth	C	0~7	7			
6	**DYCD**	Delay of YC signal output	d_yc_delay	C	0~63	2			
7	**DYSD**	Delay of YS signal output	d_ys_delay	C	0~7	1			
						MID Mode: Signle & Favorite			
						Single 480i&p	Single 1080i	Favorite	
8	**MDHP**	Horizontal position of the main picture	m_dsp_hpos		0~255	33		12	
9	**MDVP**	Vertical position of the main picture	m_dsp_vpos		0~255	32	8	14	
10	**MDHS**	Horizontal size of the main picture	m_dsp_hsiz		0~255	230		158	
11	**MDVS**	Vertical size of the main picture	m_dsp_vsiz		0~255	120	135	106	
						MID Mode: P&P & Favorite			
12	**MLHP**	(Horizontal position of the multi pictures)			0~255	54			
13	**MLVP**	(Vertical position of the multi pictures)			0~255	31			
						MID Mode: Favorite			
14	**SDHP**	Horizontal position of the sub picture	s_dsp_hpos		0~255	172			
15	**SDVP**	Vertical position of the sub picture	s_dsp_vpos		0~255	14			
16	**SDHS**	Horizontal size of the sub picture	s_dsp_hsiz		0~255	61			
17	**SDVS**	Vertical size of the sub picture	s_dsp_vsiz		0~255	41			
						MID Mode: All (Single & P&P & Favorite)			
18	**DPSW**	Switch of display output PLL	dsp_pll_sw	C	0, 1	0			0: MUST be used in DX1A-2001, 1: Used in DX1A-2000
19	**MDL0**	Model selection 0 (0: 16x9, 1: 4x3)		C	0, 1	0			

Note:
* These MID1 settings are used for DX1A-2001 ONLY. The DPSW setting was changed from 1 in DX1A-2000 to 0 in DX1A-2001.

DX1A-2001&2000 SERVICE LIST (#11): MID2 (DRC-in Data)

Device Name: CXD9509AQ { MID-XA / Fujitsu & SONY } / IC3408 (B-board) / P/N: 8-759-672-57 (SBorSD#: NA)
Slave Address: 2Eh { Controlled through MID-XA Micro (IC3090/B-board, Slave Address: 64h) / P/N: 6-800-050-01 (SB#: V4216) }
MID-XA Micro (MASK type): MB94918RPF-G-137-BND, **MID-XA Software:** Version 12/08/00, (P/N: 6-800-050-01)

Register No & Name		Control Register Function & Link	Register Name (Software)	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)						
						MID Mode: Single		MID Mode: P&P & Favorite			MID Mode: Freeze	
						YC 480i	YPbPr 480i	YC 480i	YPbPr 480i	YC 480i-(R)	YC 480i	YPbPr 480i
0	DRHP	Horizontal position of the active display area (DRC-in)	drc_hactv_pos		0~255	120	116	131	129	137	138	136
1	DRHS	Hsize of the active display area (DRC-in)	drc_hactv_siz		0~255	174	174	167	167	168	165	165
2	DRVP	Vposition of the active display area (DRC-in)	drc_vactv_pos		0~63	38	38	53	53	53	53	53
3	DRVS	Vertical size of the active display area (DRC-in)	drc_vactv_siz		0~255	120	120	112	112	112	112	112

Note:
The same MID2 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#12): MID3 (VDO-in Data) (Part-1/2)

Device Name: CXD9509AQ { MID-XA / Fujitsu & SONY } / IC3408 (B-board) / P/N: 8-759-672-57 (SBorSD#: NA)
Slave Address: 2Eh { Controlled through MID-XA Micro (IC3090/B-board, Slave Address: 64h) / P/N: 6-800-050-01 (SB#: V4216) }
MID-XA Micro (MASK type): MB94918RPF-G-137-BND, **MID-XA Software:** Version 12/08/00, (P/N: 6-800-050-01)

Register No & Name		Control Register Function & Link	Register Name (Software)	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)				Comment
						MID Mode: Single				Dummy-480i settings are used for No Signal cases. These settings continue to the next page.
							YPbPr 480P		Dummy 480i	
0	VDHP	Horizontal position of the active display area (VDO-in)	vdo_hactv_pos		0~255		122		179	
1	VDHS	Horizontal pixel size of the active display area (VDO-in)	vdo_hactv_pos		0~255		159		199	
2	VDVE	Vertical even position of the active display area (VDO-in)	vdo_vactv_evn		0~63		39		24	
3	VDVS	Vertical line size of the active display area (VDO-in)	vdo_vactv_pos		0~255		129		56	
						YC 480i	YPbPr 480P	YPbPr 1080i	Dummy 480i	
4	VDVO	Vertical odd position of the active display area (VDO-in)	vdo_vactv_odd		0~3	0	0	0	0	
5	VCPO	Clamp pulse output timing (VDO-in)	vdo_clp_pos		0~255	95	70	40	90	
6	VCWD	Clamp pulse width (VDO-in)	vdo_clp_wdt		0~7	3	3	3	3	
7	VYCD	Analog input YC delay (VDO-in)	vdo_yc_delay		0~63	0	0	0	0	
							YPbPr 480P	YPbPr 1080i		
8	VSTP	PD stop line count of external PLL (VDO-in)	vdo_pll_stop		0~255		119	160		
9	VSTT	PD start line count of external PLL (VDO-in)	vdo_pll_strt		0~15		7	0		
						MID Mode: All (Single & P&P & Favorite)				
10	VHSC	Horizontal sync cycle (VDO-in)	vdo_hsync_cyc		0~255	130				

Note:
The same MID3 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#12): MID3 (VDO-in Data) (Part-2/2)

Register No & Name	Data Initial Setting (32V&36V CRTs)				Data Initial Setting (32V&36V CRTs)			Comment
	MID Mode: P&P / Favorite				MID Mode: FREEZE			
	YC 480i	YPbPr 480P	YPbPr 1080i	Dummy 480i	YPbPr 480P	YPbPr 1080i	Dummy 480i	Dummy-480i settings are used for No Signal cases.
#0 **VDHP (cont.)**	197	127	91	179	131	98	179	
#1 **VDHS (cont.)**	219	154	151	199	153	149	199	
#2 **VDVE (cont.)**	24	53	37	24	53	37	24	
#3 **VDVS (cont.)**	56	112	126	56	112	126	56	

Note:
The same MID3 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#13): MID5 (Picture Data: MIDE) (Part-1/4)

Device Name: CXD9509AQ { MID-XA / Fujitsu & SONY } / IC3408 (B-board) / P/N: 8-759-672-57 (SBorSD#: NA)
Slave Address: 2Eh { Controlled through MID-XA Micro (IC3090/B-board, Slave Address: 64h) / P/N: 6-800-050-01 (SB#: V4216) }
MID-XA Micro (MASK type): MB94918RPF-G-137-BND, MID-XA Software: Version 12/08/00, (P/N: 6-800-050-01)

Register No	Name	Control Register Function & Link	Register Name (Software)	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				
		Settings for P&P (Main)				UHF/VHF & CVideo				YPbPr-480i (DVD)				
						Pro	Movie	Standard	Vivid	Pro	Movie	Standard	Vivid	
0	**POP**	Selection of service data tables (Table #: 0~15)			0~15	0	1	2	3	4	5	6	7	See the next page.
1	**MHLY**	Y coefficient code of Horizontal LPF (M)	m_hlpf_ycoef		0~3	1	1	1	1	1	1	1	1	
2	**MHLC**	C coefficient code of Horizontal LPF (M)	m_hlpf_ccoef		0~3	3	3	3	3	3	3	3	3	
3	**MVLY**	Y coefficient code of Vertical LPF (M)	m_vlpf_ycoef		0~3	0	0	0	0	0	0	0	0	
4	**MVLC**	C coefficient code of Vertical LPF (M)	m_vlpf_ccoef		0~3	0	0	0	0	0	0	0	0	
5	**MHYR**	Y coreing code of horizontal enhancement (M)	m_henh_ycore		0~3	0	0	0	0	0	0	0	0	
6	**MHYL**	Y cliping code of horizontal enhancement (M)	m_henh_yclip		0~3	1	1	1	1	1	1	1	1	
7	**MHYE**	Y level code of horizontal enhancement (M)	m_henh_yenh		0~7	4	0	0	0	3	0	0	0	
8	**MHYO**	Y coefficient code of horizontal enhancement (M	m_henh_ycof		0, 1	1	1	1	1	1	1	1	1	
9	**MHCR**	C coreing code of horizontal enhancement (M)	m_henh_ccore		0~3	0	0	0	0	0	0	0	0	
10	**MHCL**	C cliping code of horizontal enhancement (M)	m_henh_cclip		0~3	1	1	1	1	1	1	1	1	
11	**MHCE**	C level code of horizontal enhancement (M)	m_henh_cenh		0~7	0	0	0	0	0	0	0	0	
12	**MHCO**	C coefficient code of horizontal enhancement (M	m_henh_ccof		0, 1	1	1	1	1	1	1	1	1	
13	**MVYR**	Y coreing code of vertical enhancement (M)	m_venh_ycore		0~3	0	0	0	0	0	0	2	2	
14	**MVYL**	Y cliping code of vertical enhancement (M)	m_venh_yclip		0~3	1	1	1	1	1	1	1	1	
15	**MVYE**	Y level code of vertical enhancement (M)	m_venh_yenh		0~7	0	0	0	0	0	0	2	5	
16	**MVCR**	C coreing code of vertical enhancement (M)	m_venh_ccore		0~3	0	0	0	0	0	0	0	0	
17	**MVCL**	C cliping code of vertical enhancement (M)	m_venh_cclip		0~3	1	1	1	1	1	1	1	1	
18	**MVCE**	C level code of vertical enhancement (M)	m_venh_cenh		0~7	0	0	0	0	0	0	0	0	

Note:
The same MID5 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#13): MID5 (Picture Data: MIDE) (Part-2/4)

Register No & Name	Data Initial/Average Setting (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				Comment
	YPbPr-480p				YPbPr-1080i				
	Pro	Movie	Standard	Vivid	Pro	Movie	Standard	Vivid	
#0 **POP (cont.)**	8	9	10	11	12	13	14	15	
#1 **MHLY (cont.)**	1	1	1	1	1	1	1	1	
#2 **MHLC (cont.)**	3	3	3	3	3	3	3	3	
#3 **MVLY (cont.)**	0	0	0	0	0	0	0	0	
#4 **MVLC (cont.)**	0	0	0	0	0	0	0	0	
#5 **MHYR (cont.)**	0	0	0	0	0	0	0	0	
#6 **MHYL (cont.)**	1	1	1	1	1	1	1	1	
#7 **MHYE (cont.)**	4	0	0	0	4	0	0	0	
#8 **MHYO (cont.)**	1	1	1	1	1	1	1	1	
#9 **MHCR (cont.)**	0	0	0	0	0	0	0	0	
#10 **MHCL (cont.)**	1	1	1	1	1	1	1	1	
#11 **MHCE (cont.)**	0	0	0	0	0	0	0	0	
#12 **MHCO (cont.)**	1	1	1	1	1	1	1	1	
#13 **MVYR (cont.)**	0	0	2	2	0	0	0	0	
#14 **MVYL (cont.)**	1	1	1	1	1	1	1	1	
#15 **MVYE (cont.)**	0	0	2	5	0	0	0	0	
#16 **MVCR (cont.)**	0	0	0	0	0	0	0	0	
#17 **MVCL (cont.)**	1	1	1	1	1	1	1	1	
#18 **MVCE (cont.)**	0	0	0	0	0	0	0	0	

Note:
The same MID5 service data are used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#13): MID5 (Picture Data: MIDE) (Part-3/4)

Register No.&Name		Control Register Function & Link	Register Name (Software)	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				
		Settings for P&P (Sub)				UHF/VHF & CV				YPbPr-480i (DVD)				
						Pro	Movie	Standard	Vivid	Pro	Movie	Standard	Vivid	
0	**POP**	Selection of service data tables (Table #: 0~15)			0~15	0	1	2	3	4	5	6	7	See the next page.
19	**SHLY**	Y coefficient code of Horizontal LPF (S)	s_hlpf_ycoef		0~7	0	0	0	0	0	0	0	0	
20	**SHLC**	C coefficient code of Horizontal LPF (S)	s_hlpf_ccoef		0~7	0	0	0	0	0	0	0	0	
21	**SVLY**	Y coefficient code of Vertical LPF (S)	s_vlpf_ycoef		0~7	0	0	0	0	0	0	0	0	
22	**SVLC**	C coefficient code of Vertical LPF (S)	s_vlpf_ccoef		0~7	0	0	0	0	0	0	0	0	
23	**SHYR**	Y coreing code of horizontal enhancement (S)	s_henh_ycore		0~3	0	0	0	0	0	0	0	0	
24	**SHYL**	Y cliping code of horizontal enhancement (S)	s_henh_yclip		0~3	0	0	0	0	0	0	0	0	
25	**SHYE**	Y level code of horizontal enhancement (S)	s_henh_yenh		0~7	0	0	0	0	0	0	0	0	
26	**SHYO**	Y coefficient code of horizontal enhancement (S	s_henh_ycof		0, 1	0	0	0	0	0	0	0	0	
27	**SHCR**	C coreing code of horizontal enhancement (S)	s_henh_ccore		0~3	0	0	0	0	0	0	0	0	
28	**SHCL**	C cliping code of horizontal enhancement (S)	s_henh_cclip		0~3	0	0	0	0	0	0	0	0	
29	**SHCE**	C level code of horizontal enhancement (S)	s_henh_cenh		0~7	0	0	0	0	0	0	0	0	
30	**SHCO**	C coefficient code of horizontal enhancement (S	s_henh_ccof		0, 1	0	0	0	0	0	0	0	0	
31	**SVYR**	Y coreing code of vertical enhancement (S)	s_venh_ycore		0~3	0	0	0	0	0	0	0	0	
32	**SVYL**	Y cliping code of vertical enhancement (S)	s_venh_yclip		0~3	0	0	0	0	0	0	0	0	
33	**SVYE**	Y level code of vertical enhancement (S)	s_venh_yenh		0~7	0	0	0	0	0	0	0	0	
34	**SVCR**	C coreing code of vertical enhancement (S)	s_venh_ccore		0~3	0	0	0	0	0	0	0	0	
35	**SVCL**	C cliping code of vertical enhancement (S)	s_venh_cclip		0~3	0	0	0	0	0	0	0	0	
36	**SVCE**	C level code of vertical enhancement (S)	s_venh_cenh		0~7	0	0	0	0	0	0	0	0	

Note:
The same MID5 service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#13): MID5 (Picture Data: MIDE) (Part-4/4)

Register No.&Name	Data Initial/Average Setting (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				Comment
	YPbPr-480p				YPbPr-1080i				
	Pro	Movie	Standard	Vivid	Pro	Movie	Standard	Vivid	
#0 **POP (cont.)**	8	9	10	11	12	13	14	15	
#19 **SHLY (cont.)**	0	0	0	0	0	0	0	0	
#20 **SHLC (cont.)**	0	0	0	0	0	0	0	0	
#21 **SVLY (cont.)**	0	0	0	0	0	0	0	0	
#22 **SVLC (cont.)**	0	0	0	0	0	0	0	0	
#23 **SHYR (cont.)**	0	0	0	0	0	0	0	0	
#24 **SHYL (cont.)**	0	0	0	0	0	0	0	0	
#25 **SHYE (cont.)**	0	0	0	0	0	0	0	0	
#26 **SHYO (cont.)**	0	0	0	0	0	0	0	0	
#27 **SHCR (cont.)**	0	0	0	0	0	0	0	0	
#28 **SHCL (cont.)**	0	0	0	0	0	0	0	0	
#29 **SHCE (cont.)**	0	0	0	0	0	0	0	0	
#30 **SHCO (cont.)**	0	0	0	0	0	0	0	0	
#31 **SVYR (cont.)**	0	0	0	0	0	0	0	0	
#32 **SVYL (cont.)**	0	0	0	0	0	0	0	0	
#33 **SVYE (cont.)**	0	0	0	0	0	0	0	0	
#34 **SVCR (cont.)**	0	0	0	0	0	0	0	0	
#35 **SVCL (cont.)**	0	0	0	0	0	0	0	0	
#36 **SVCE (cont.)**	0	0	0	0	0	0	0	0	

Note:
The same MID5 service data are used for DX1A-2001&2000.

DX1A-2001* SERVICE LIST (#14): On-Screen Display (OSD)

Device Name: M306V2ME-153FP (V1.0) { System Micro (MASK type) / Mitsubishi } / IC701 (A-board)
Slave Address: 60h

System Micro (MASK type): M306V2ME-153FP, Sys-Software: Version 1.0, P/N: 6-800-051-01 (SB#: V9091)

Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	**HPOS**	OSD horizontal position	C	0~255	23	C: Common data
1	**HPOF**	Horizontal position for Favorite mode	C	0~255	33	
2	**VPOS**	OSD vertical position	C	0~255	5	
3	**VPOT**	Vertical position for P&P (Twin) mode	C	0~255	32	

Note:
* This OSD settings are used for DX1A-2001 ONLY. (DX1A-2000 uses two OSD settings based on two versions of system micros.)

DX1A-2001&2000 SERVICE LIST (#15): SNNR

Related Control Devices:
mPD64082 { 3D-Comb / NEC } / IC3501 (BC-board) / Slave Address: B8h
CXA2103Q { Chroma Decoder / SONY } / IC3048 (B-board) / Slave Address: 9Ah (Main)
CXA2150Q { CRT Driver / SONY } / IC201 (A-board) / Slave Address: 86h

Register No	& Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting 32V&36V CRTs				Comment
0	**SNNR**	SNNR data setting		0~3	0				
1	**SNFX**	Selection of SNNR data settings; 0: Set SNNR automatically according to WSLT value (read data)	C	0, 1	0				C: ComMon data
					WSLT Data / Threthold Range				
2	**WSLT**	Noise level detection data thretholds for SNNR data (read data)		0~255	0~30	31~62	63~126	127~255	
		SNNR data used as the (-) offset settings			**SNNR Settings Based on WSL Data (- Offset Data)**				
		SNNR = 0/1/2/3 @ WSLT £ 0/31/63/127, respectively		0~3	0	1	2	3	
3	**CPFG**	Related to 3D-COMB (mPD64082) / #19 **YPFG** settings		------	0	1	2	3	
4	**CPFT**	Related to 3D-COMB (mPD64082) / #18 **YPFT** settings		------	0	0	0	0	
		SNNR data used as the direct settings		------					
5	**CCOR**	Related to 3D-COMB (mPD64082) / #20 **YHCO** settings		------	0	1	1	1	
6	**CHCG**	Related to 3D-COMB (mPD64082) / #21 **YHCG** settings		------	1	1	1	1	
		SNNR data used as the (-) offset settings							
7	**CAPG**	Related to 3D-COMB (mPD64082) / #16 **VAPG** settings		------	0	0	0	0	
8	**3SHP**	Related to CXA2103 / #6 **SHAP** settings		------	0	1	2	3	
9	**MIDD**	Related to CXA2150P-3 / #19 **MIDE** settings		------	0	1	2	3	
10	**5SHP**	Related to CXA2150P-4 / #4 **USHP** settings		------	0	1	3	4	
11	**5YF1**	Related to CXA2150P-3 / #10 **F1LV** settings		------	0	1	2	3	
12	**5CDS**	Related to CXA2150P-3 / #11 **CDSP** settings		------	0	0	0	0	
13	**5LTI**	Related to CXA2150P-3 / #12 **LTLV** settings		------	0	0	0	0	
14	**5CTI**	Related to CXA2150P-3 / #14 **CTLV** settings		------	0	0	0	0	
15	**5VML**	Related to CXA2150P-3 / #1 **UVML** settings		------	0	0	0	0	
		SNNR data used as the (+) offset settings			**SNNR Settings Based on WSL Data (+ Offset Data)**				
16	**5VMC**	Related to CXA2150P-3 / #3 **VMCR** settings		------	0	+ 1	+ 2	+ 3	

Note:
The same SNNR service data is used for DX1A-2001&2000.
Please refer to the part numbers and SBorSD numbers given in the service list for these devices.

DX1A-2001&2000 SERVICE LIST (#16): ID-1 Detection (ID1)

Device Name: CXD2085M { ID-1 Decoder / SONY } / IC3603 (B-board) / P/N: 8-752-395-13 (SD#: S98511B)
Slave Address: 40h

Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	XJGL	XJGLK: Setting for memorizing or not the ID-1 detection status when the VTR in Fast Forward (FF) or Rewind (REW) mode	C	0, 1	0	C: Common data
1	LNJI	LNJ1: Setting for the multi/single-line ID-1 detection	C	0, 1	0	

Note:
The same ID1 service data is used for DX1A-2001&2000.
Other service controls related to CXD2085 (IDSW & DATA) are lised in Service List (CXA2150P-4) for easier engineering adjustment.

DX1A-2001&2000 SERVICE LIST (#17): Closed Caption Display & Parental Control (CCD&VCHIP)

Device Name: CXP85840A-039Q { CCD&Vchip Micro (MASK type) / SONY } / IC3602 (Main) & IC3601 (Sub) (B-board) / P/N: 8-752-916-40 (SD#: S97739B)
Slave Address: 68h (Main) & 6Ch (Sub)
CCD&Vchip Micro Software: Version 2.14

Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	HPRM	Horizontal position of CCD (Main)	C	0~255	46	C: Common data
1	HPRS	Horizontal position of CCD (Sub)	C	0~255	46	
2	RND	OSD rounding control	C	0, 1	1	
3	CCDI	Interuption control	C	0~7	3	
4	CRIP	CRI count & parity count	C	0~7	4	
5	CRIT	Charge/Discharge timing control for slice voltage level	C	0, 1	0	0: MASK-type micro, 1: OTP-type micro
6	CHMK	Horizontal mask width	C	0~63	42	
7	FPOL	Field polarity selection	C	0, 1	1	
8	LANG		C	0~3	0	
9	DATA	Switch for CCD service/test data	C	0, 1	0	
10	VCHIP	Selection of Vchip controls	C	0, 1	0	

Note:
The same CCD&VCHIP service data is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#18): OPTIONS (OP)

Device Name: M306V2ME-153FP (V1.0) { System Micro (MASK type) / Mitsubishi } / IC701 (A-board)
Slave Address: 60h

System Micro (MASK type): M306V2ME-153FP, Sys-Software: Version 1.0, P/N: 6-800-051-01 (SB#: V9091)

Register No	Register Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	**DLY1**	AC-RLY to MAIN-RLY timing = DLY1 x 50 ms	C	0~15	4	C: Common data
1	**DLY2**	Power-On Mute timing = DLY2 x 50 ms	C	0~31	12	
2	**DLY3**	DGC-RLY to MAIN-RLY timing = DLY3 x 50 ms	C	0~15	7	
3	**RAMW**	RAM monitor on/off	C	0, 1	0	

Note:
The same OP service data is used for DX1A-2001&2000.

DX1A-2001* SERVICE LIST (#19): IDENTIFICATION (ID)

Device Name: M306V2ME-153FP (V1.0) { System Micro (MASK type) / Mitsubishi } / IC701 (A-board)
Slave Address: 60h

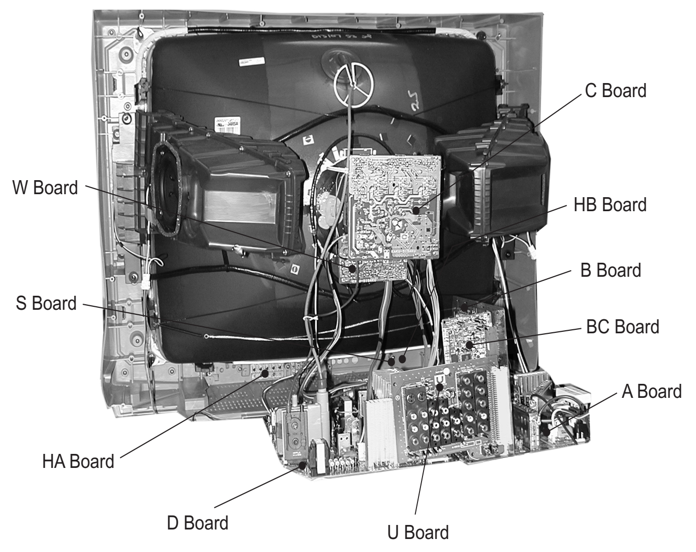
System Micro (MASK type): M306V2ME-153FP, Sys-Software: Version 1.0, P/N: 6-800-051-01 (SB#: V9091)

Register No	Register Name	Control Register Function & Link	Data Type	Data Range	KV-38DRC2 KV-38DRC2C	Comment
		Shipping Destination-related Settings				
0	**ID0**	Selection of OSD languages & color systems		0~255	25	
1	**ID1**	Selection of composite & s-video inputs		0~255	127	
2	**ID2**	Selection of audio-related controls		0~255	255	
3	**ID3**	Selection of basic system settings		0~255	202	
4	**ID4**	Selection of basic system settings		0~255	251	
5	**ID5**	Selection of advanced system settings		0~255	177	
6	**ID6**	Selection of sub picture-related settings		0~255	54	
7	**ID7**	Selection of some reserved settings		0~255	88	

Note:
* These ID settings are used for DX1A-2001 ONLY. (DX1A-2000 uses different ID settings.)
The system micro name, software&patch versions, and the status of NVM devices are displayed only when in this service catergory (#19): ID.

SECTION 5: DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



The components identified by shading and symbol are critical for safety. Replace only with part number specified.

The symbol indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

Les composants identifies par un trame et une marque sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

Le symbole indique une fusible a action rapide. Doit etre remplace par une fusible de meme yaleur, comme maque.

The components identified by in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be necessary, replace only with the value originally used (Refer to Safety Related Adjustments on page 18).

When replacing components identified by , make the necessary adjustments as indicated. If the results do not meet the specified value, change the component identified by and repeat the adjustment until the specified value is achieved.

When replacing the parts listed in the table below, it is important to perform the related adjustments.

Part Replaced ( )	Adjustment ( )
D BOARD: T8001, R8035, R8036, R8037, R8038, R8039, R8040, R6590, RV8001, RV8002, IC6503, IC8001, IC8003, IC8004, D8004, D8014, R8016, R8021, R8028, R8041, R8042, R8044, R8072, R8073, R8074, R8077, R8078, R8080, R8081, R8082, R8091, R8095	D BOARD: RV8001, RV8002

5-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

All capacitors are in µF unless otherwise noted. pF : µµF 50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. K = 1000, M = 1000K.

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm

Rating electrical power : $^{1}/_{4}$ W

$^{1}/_{4}$ W in resistance, $^{1}/_{10}$ W and $^{1}/_{8}$ W in chip resistance.

: nonflammable resistor.

: fusible resistor.

Δ : internal component.

: panel designation and adjustment for repair.

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a color-bar signal input.

Readings are taken with a 10M digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibillity.

: B+line.

: B-line. (Actual measured value may be different).

: signal path. (RF)

Circled numbers are waveform references.

REFERENCE INFORMATION

RESISTOR

: RN	METAL FILM
: RC	SOLID
: FPRD	NONFLAMMABLE CARBON
: FUSE	NONFLAMMABLE FUSIBLE
: RW	NONFLAMMABLE WIREWOUND
: RS	NONFLAMMABLE METAL OXIDE
: RB	NONFLAMMABLE CEMENT
:	ADJUSTMENT RESISTOR

CAPACITOR

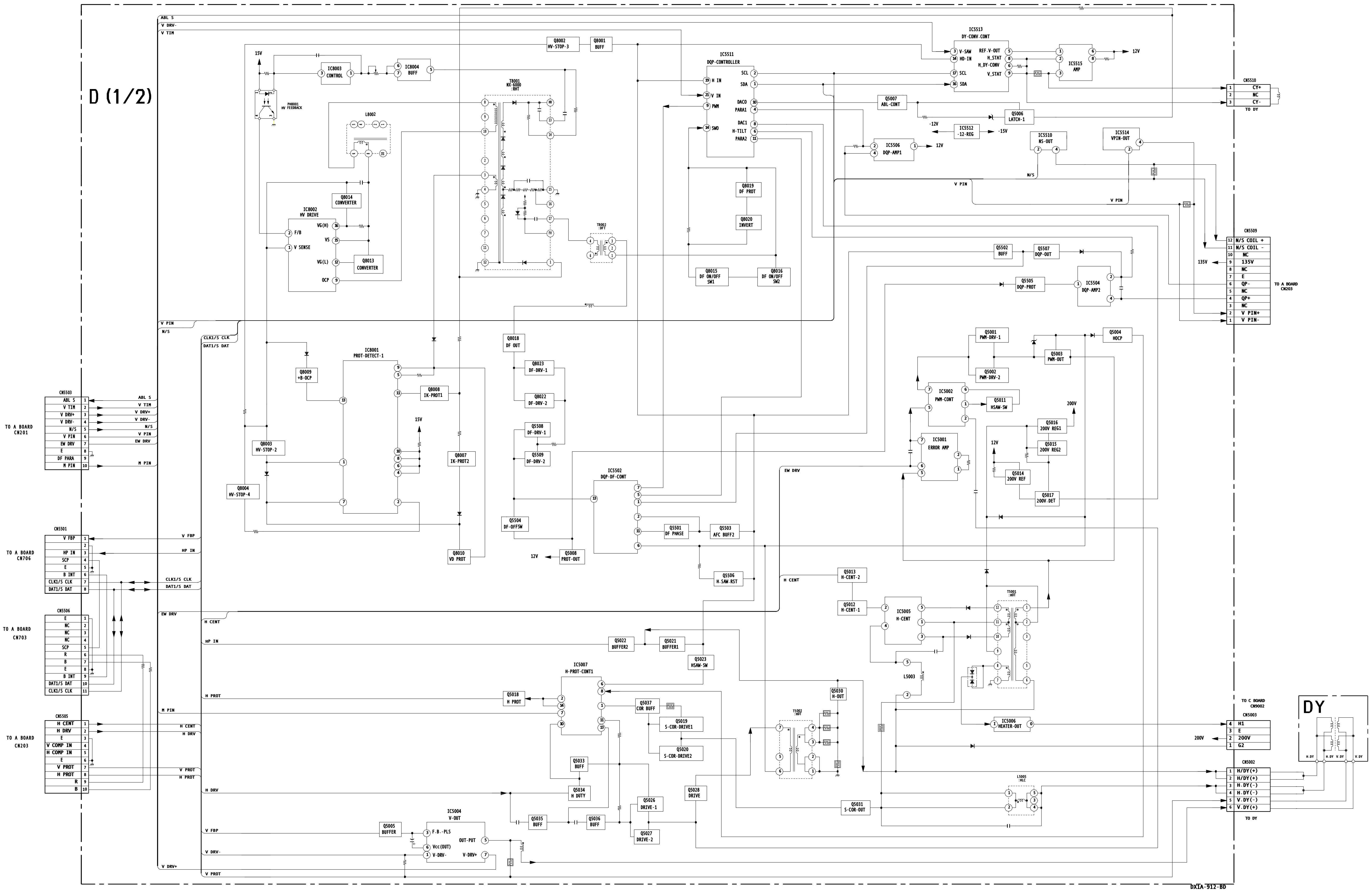
: TA	TANTALUM
: PS	STYROL
: PP	POLYPROPYLENE
: PT	MYLAR
: MPS	METALIZED POLYESTER
: MPP	METALIZED POLYPROPYLENE
: ALB	BIPOLAR
: ALT	HIGH TEMPERATURE
: ALR	HIGH RIPPLE

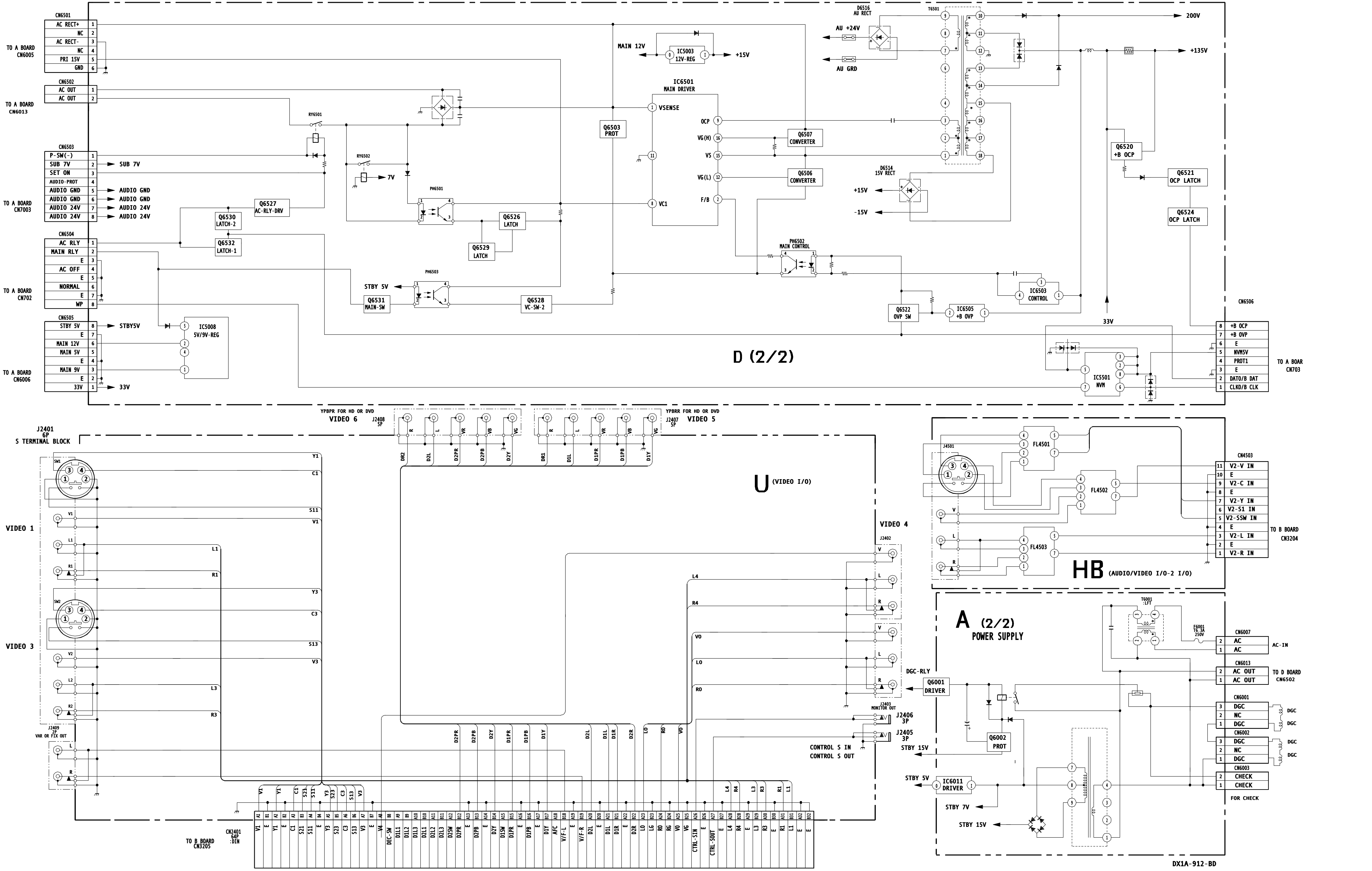
COIL

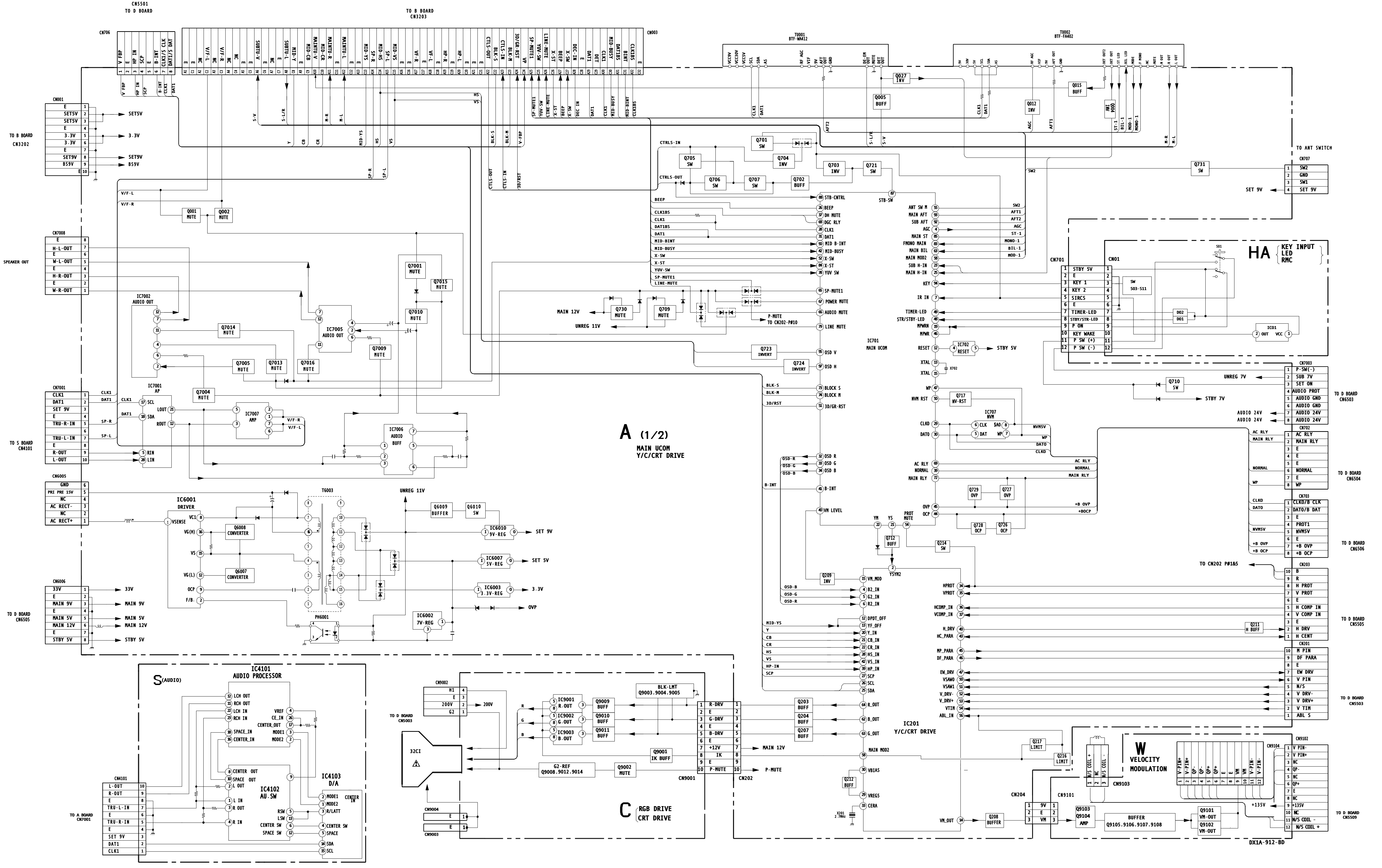
: LF-8L	MICRO INDUCTOR

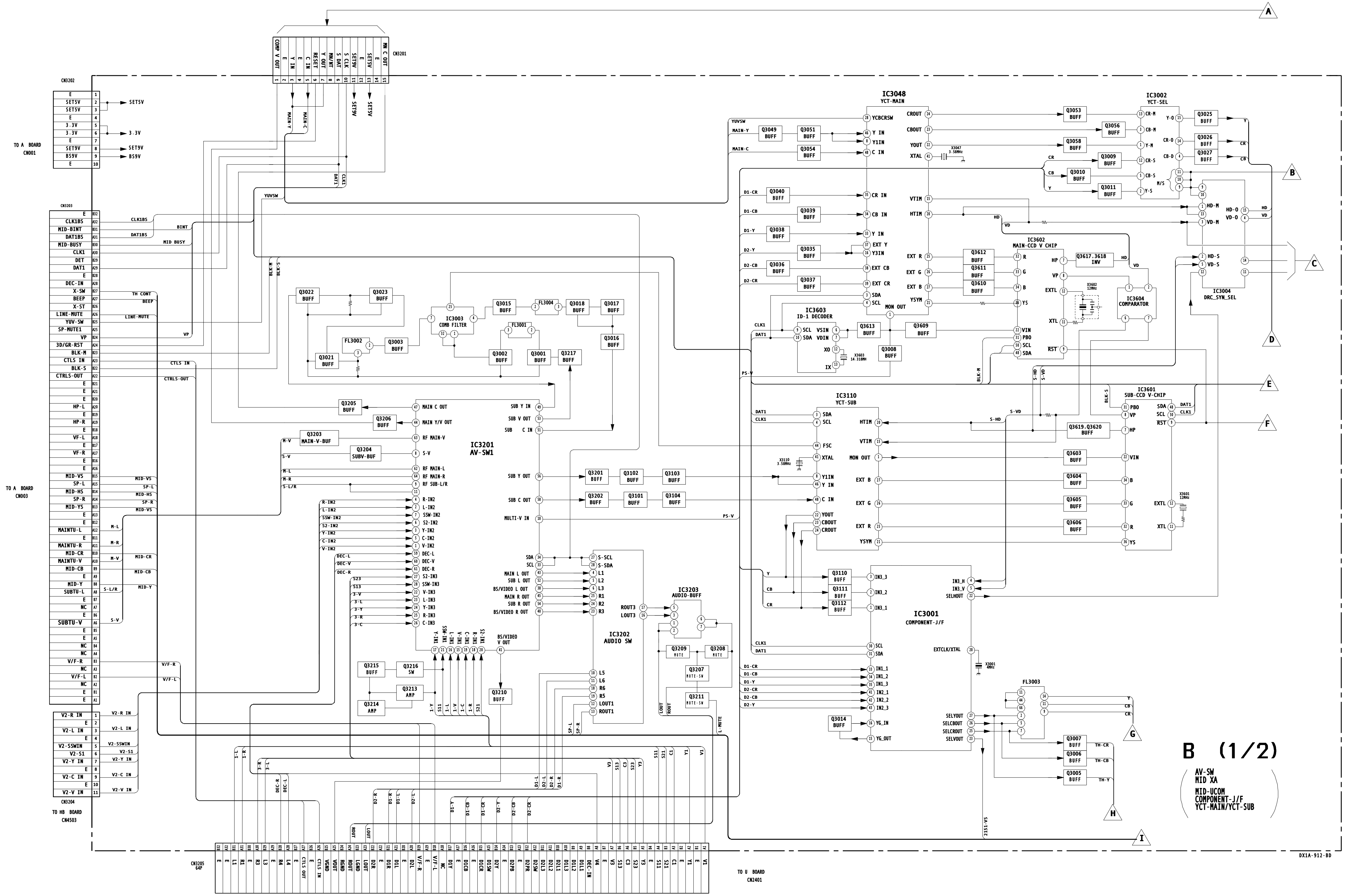
5-3. BLOCK DIAGRAM AND SCHEMATICS

BLOCK DIAGRAM (1 OF 5)



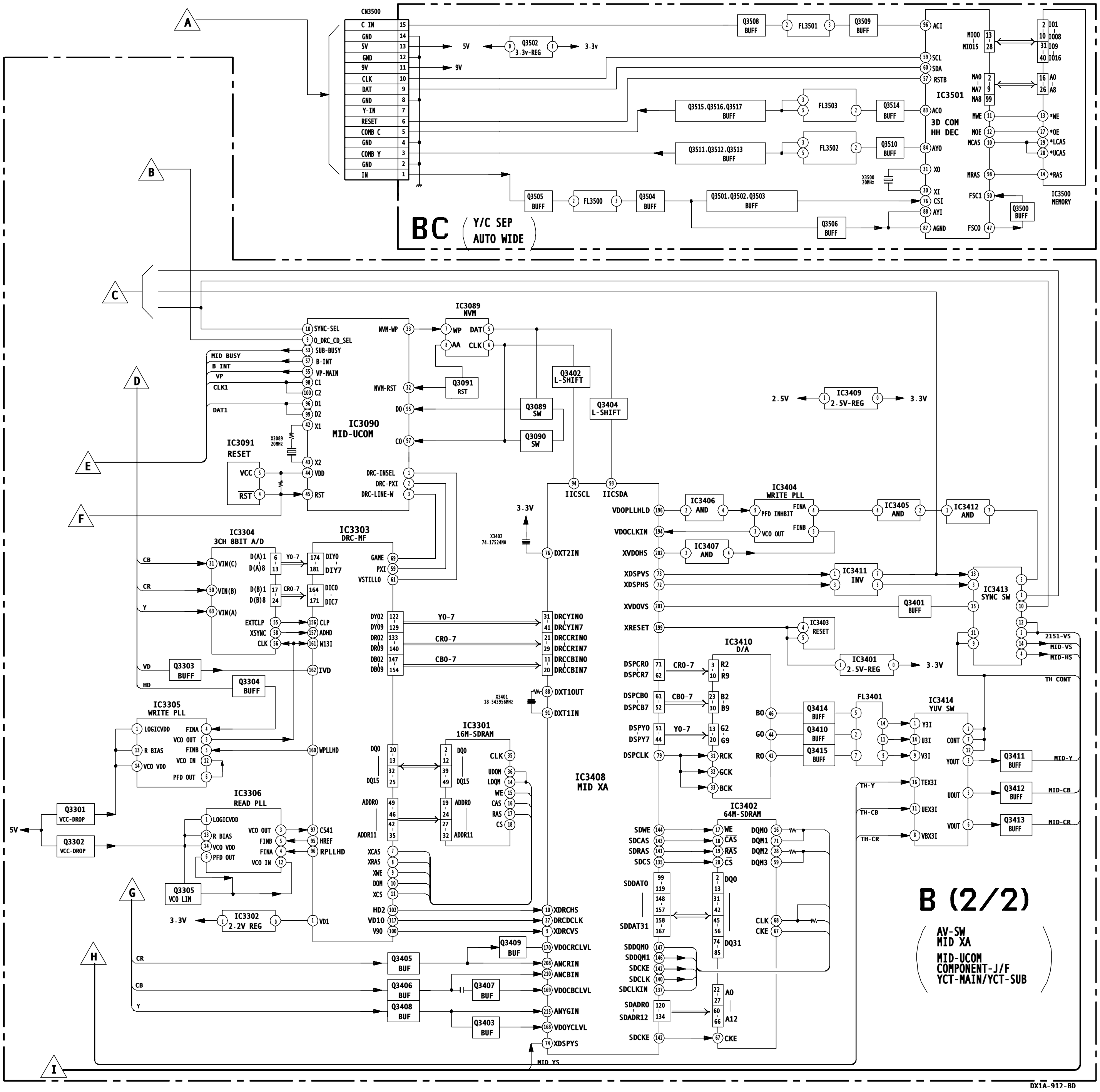

D (2/2)
U (VIDEO I/O)
HB (AUDIO/VIDEO I/O-2 I/O)
A (2/2)
POWER SUPPLY
IC6501
MAIN DRIVER
IC5003
12V-REG
IC5008
5V/9V-REG
IC6505
+B OVP
IC6503
CONTROL
IC5501
NVM
IC6011
DRIVER
VIDEO 1
VIDEO 3
VIDEO 4
VIDEO 5
VIDEO 6
CN2401
64P
:DIN
TO B BOARD
CN3205
TO B BOARD
CN3204
DX1A-912-BD

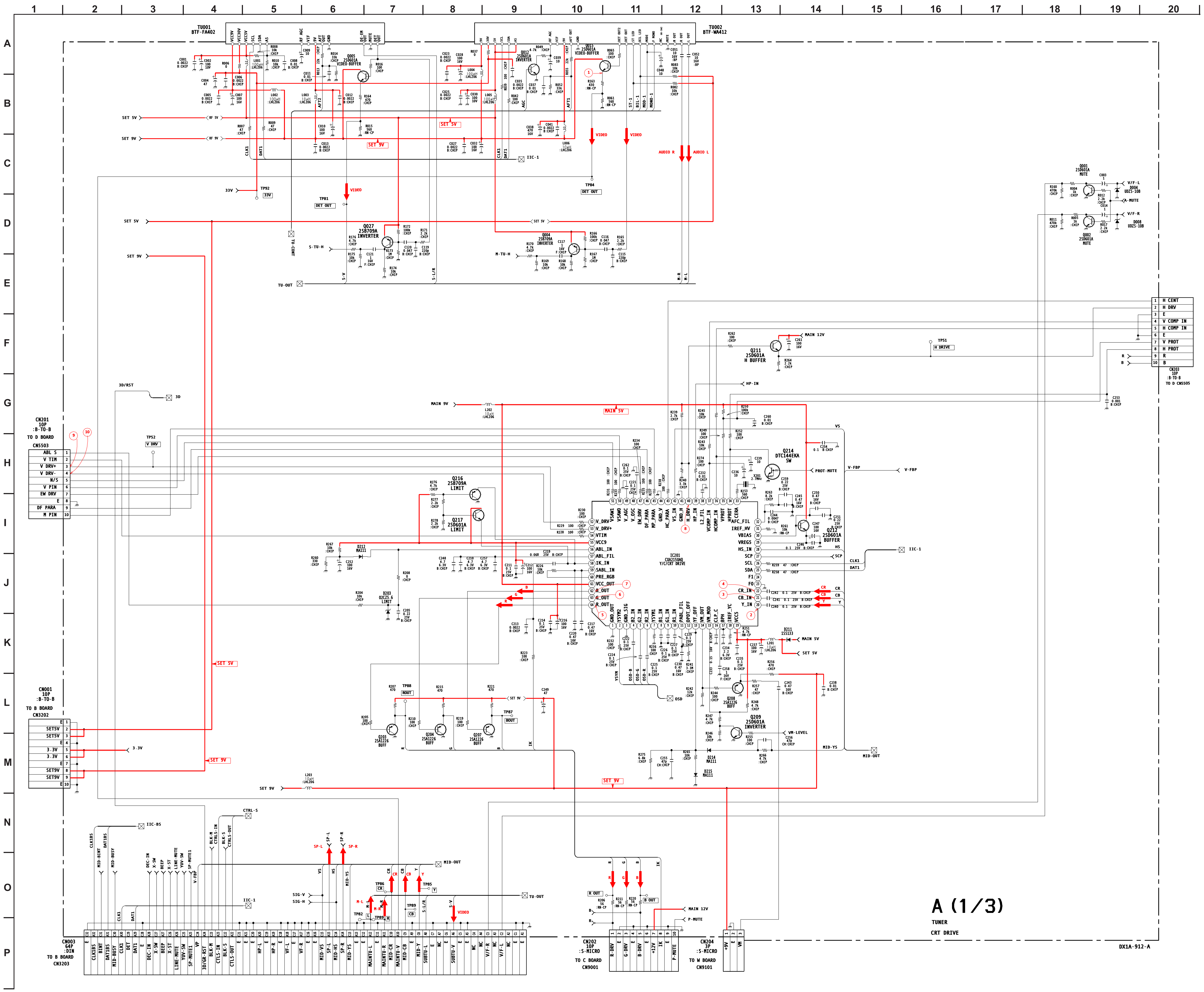

A (1/2) MAIN UCOM Y/C/CRT DRIVE
HA KEY INPUT LED RMC
S (AUDIO)
C RGB DRIVE CRT DRIVE
W VELOCITY MODULATION
IC4101 AUDIO PROCESSOR
IC701 MAIN UCOM
IC201 Y/C/CRT DRIVE
IC6001 DRIVER
DX1A-912-BD



CN3201
CN3202
TO A BOARD CN001
CN3203
TO A BOARD CN003
CN3204
TO HB BOARD CN4503
CN3205 64P
TO U BOARD CN2401
IC3048 YCT-MAIN
IC3002 YCT-SEL
IC3602 MAIN-CCD V CHIP
IC3604 COMPARATOR
IC3004 DRC_SYN_SEL
IC3603 ID-1 DECODER
IC3003 COMB FILTER
IC3110 YCT-SUB
IC3601 SUB-CCD V-CHIP
IC3201 AV-SW1
IC3202 AUDIO SW
IC3203 AUDIO-BUFF
IC3001 COMPONENT-J/F
FL3003
B (1/2)
AV-SW
MID XA
MID-UCOM
COMPONENT-J/F
YCT-MAIN/YCT-SUB
DX1A-912-BD

BLOCK DIAGRAM (5 OF 5)



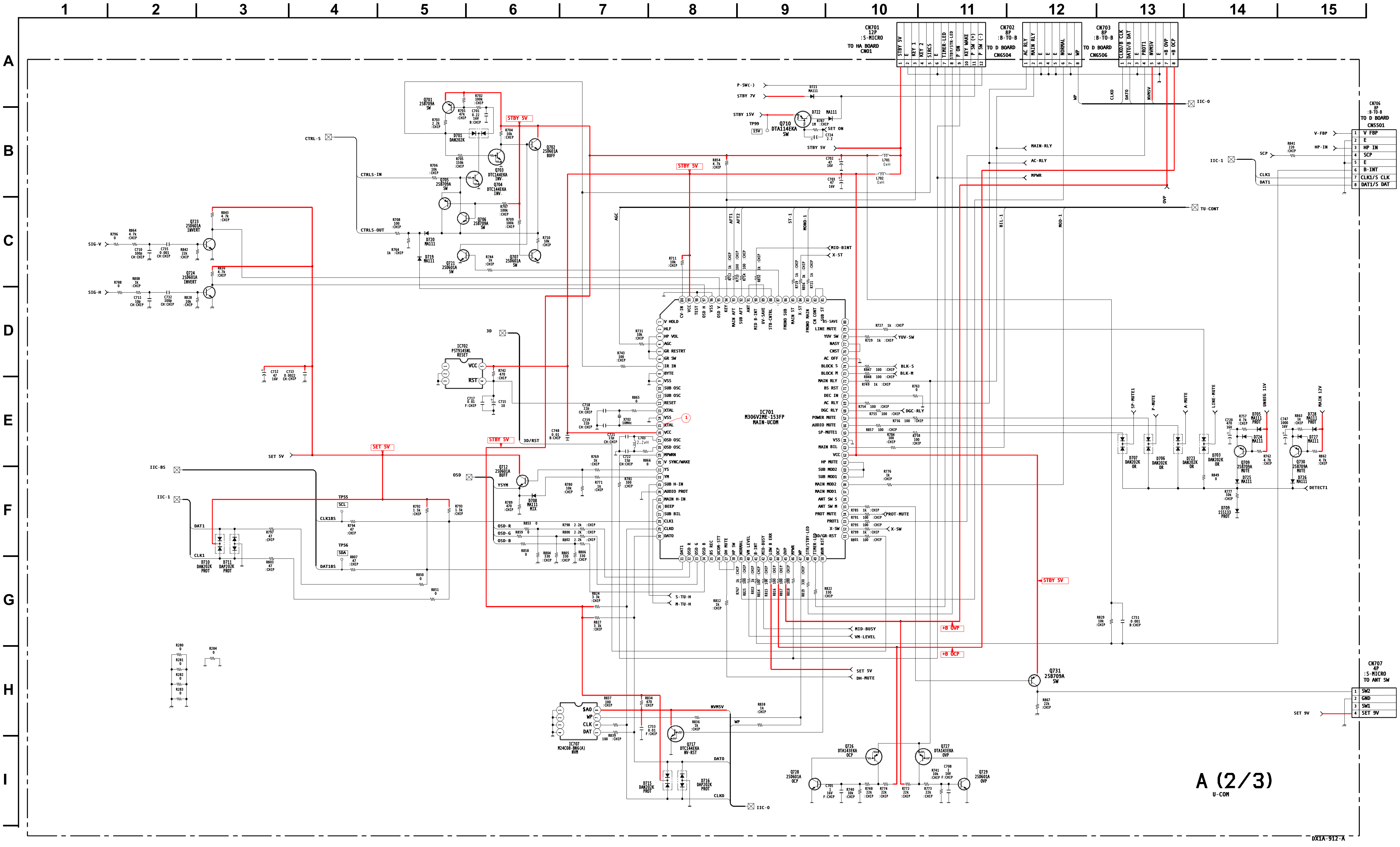


A BOARD TRANSISTOR VOLTAGE LIST

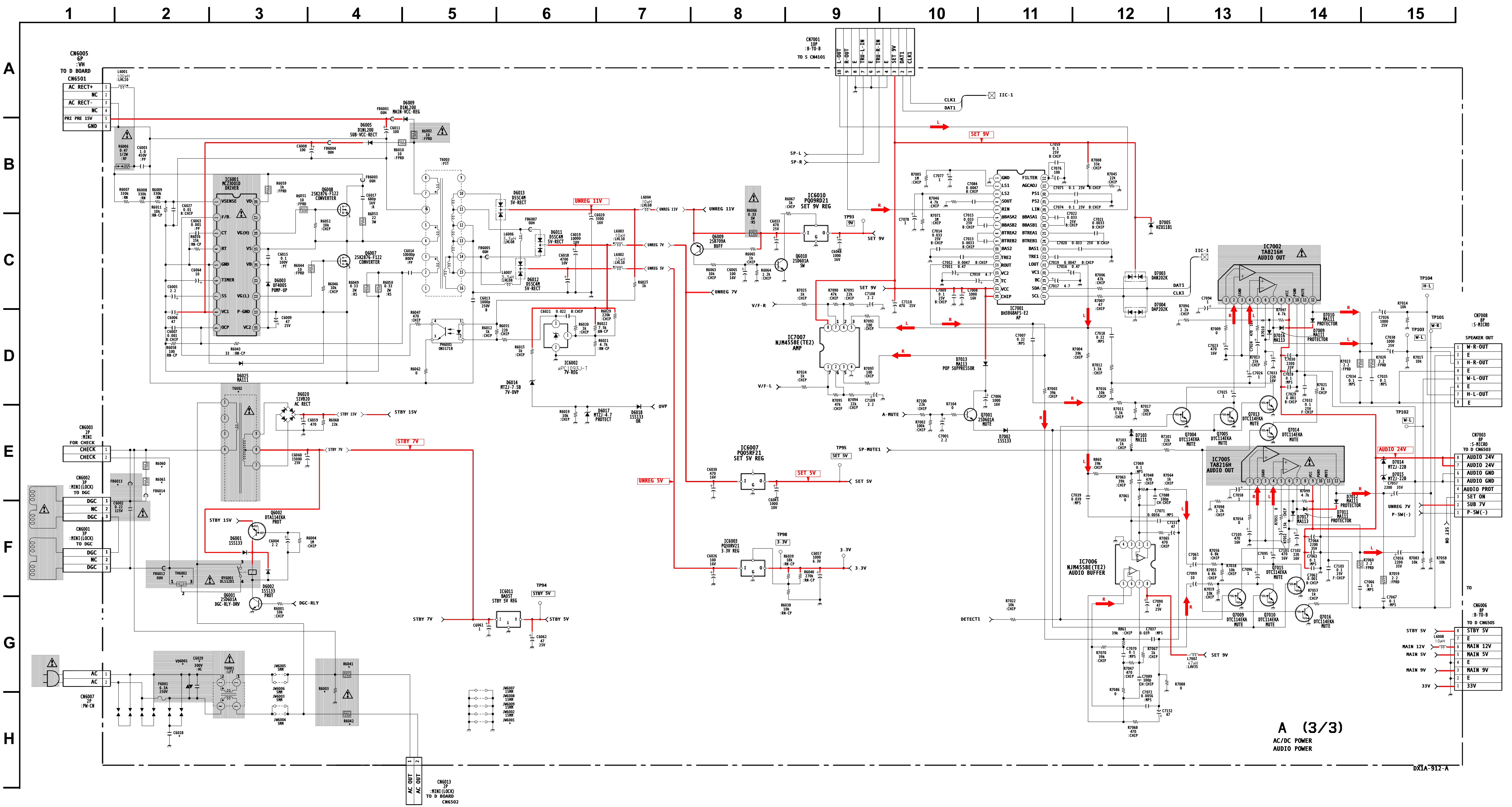
	B	C	E		B	C	E		B	C	E
Q001	0.4	0.0	GND	Q702	0.1	5.0	0.0	Q731	0.0	0.0	5.0
Q002	0.4	0.0	GND	Q703	4.6	5.0	GND	Q6001	0.0	18.0	GND
Q004	4.6	1.1	5.0	Q704	0.0	4.4	GND	Q6002	19.7	18.5	19.8
Q005	4.3	9.0	3.6	Q705	5.0	0.0	0.0	Q6009	10.3	0.0	10.9
QO12	0.1	7.5	GND	Q706	5.0	0.0	0.0	Q6010	0.0	9.0	GND
Q015	6.2	9.0	5.5	Q707	0.5	0.0	GND	Q7001	0.3	0.0	0.0
Q027	4.5	0.0	5.0	Q709	10.4	0.7	10.2	Q7004	0.3	8.0	GND
Q203	2.3	GND	3.2	Q710	19.5	0.0	19.9	Q7005	0.0	0.0	GND
Q204	2.5	GND	3.2	Q712	0.0	5.0	0.0	Q7009	0.3	8.0	GND
Q207	2.3	GND	3.2	Q717	0.0	5.0	GND	Q7010	0.0	0.7	GND
Q208	2.3	GND	3.2	Q721	0.0	0.0	GND	Q7013	0.0	0.0	GND
Q209	0.8	2.2	GND	Q723	0.2	4.6	GND	Q7014	0.0	4.1	GND
Q211	2.8	11.5	2.3	Q724	0.5	4.6	GND	Q7015	0.0	0.0	GND
Q212	5.6	9.0	5.0	Q726	0.0	0.1	6.3	Q7016	0.0	4.2	GND
Q214	0.0	0.0	GND	Q727	0.0	0.1	6.3		**D**	**G**	**S**
Q216	4.5	GND	3.9	Q728	0.1	0.0	GND	Q6007	150.4	4.7	0.0
Q217	4.4	8.7	3.9	Q729	0.1	0.0	GND	Q6008	303.0	154.6	150.0
Q701	4.7	4.7	5.0	Q730	10.4	0.7	10.2				

All voltages are in V.

A BOARD SCHEMATIC DIAGRAM (2 OF 3)

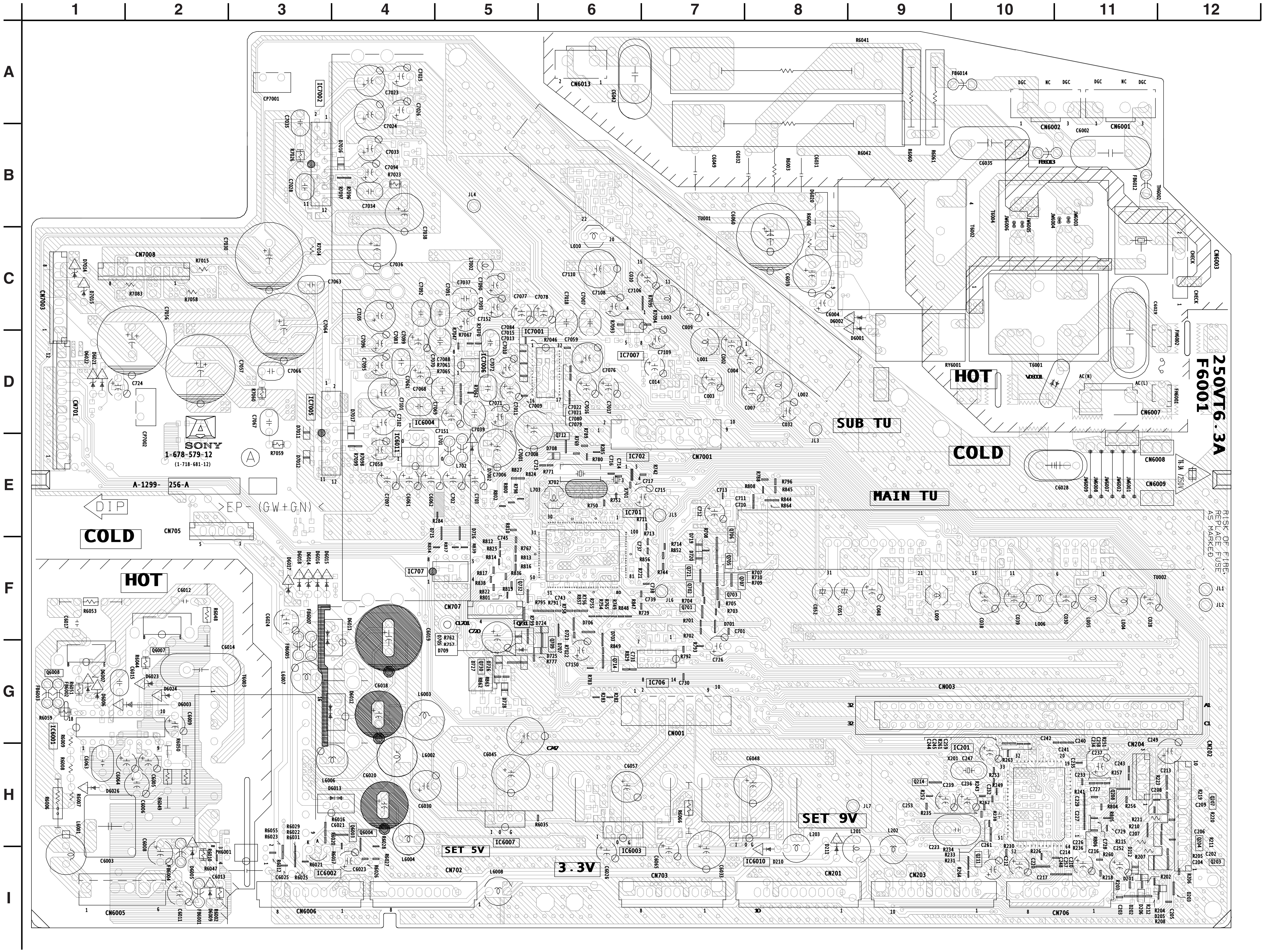


A BOARD SCHEMATIC DIAGRAM (3 OF 3)



A [TUNER, CRT DRIVE, U-COM, AC/DC POWER, AUDIO POWER]

COMPONENT SIDE

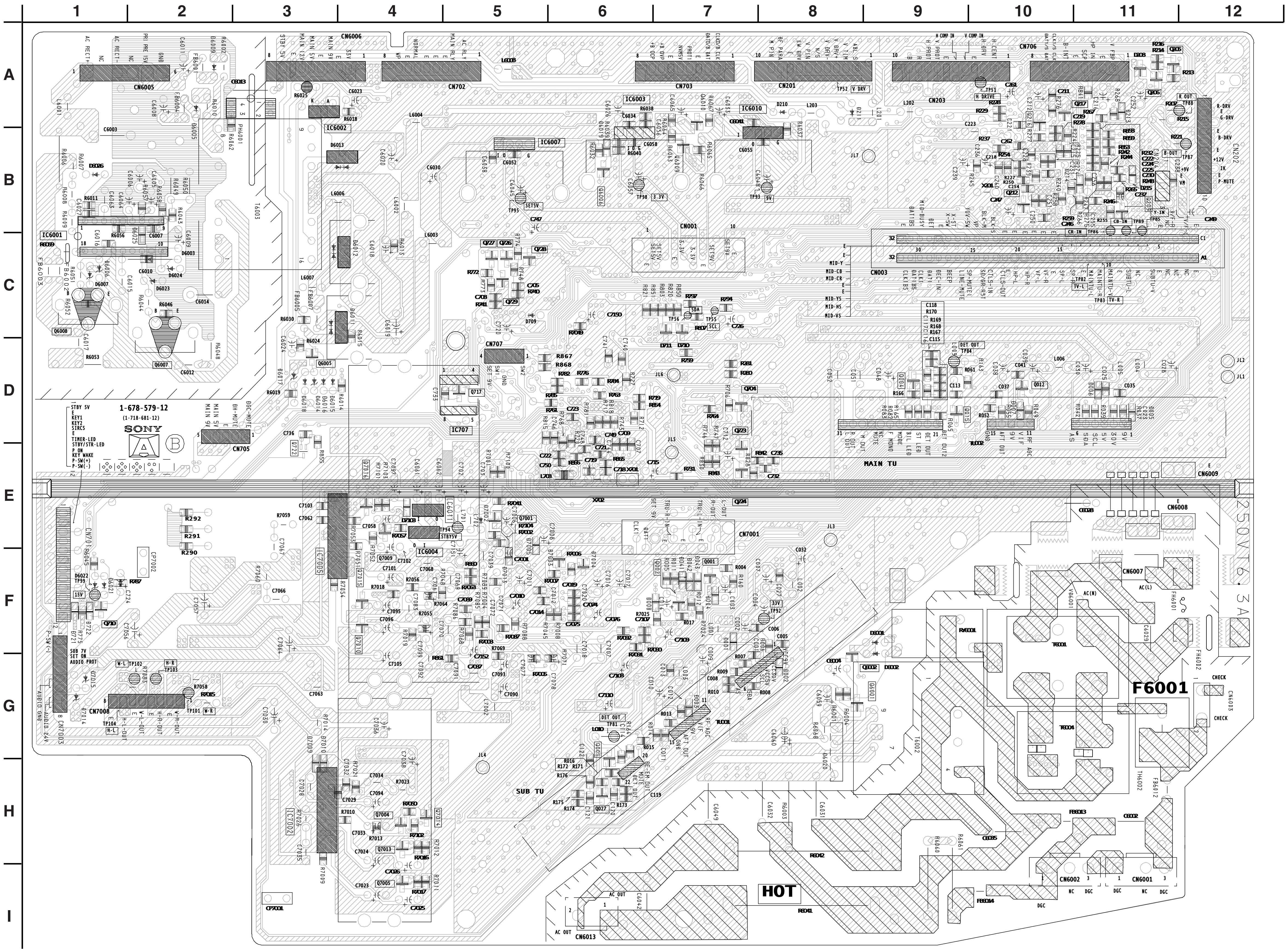


A BOARD LOCATOR LIST (COMPONENT SIDE)

DIODE		IC	
D203	I-12	IC201	H-10
D211	I-8	IC701	E-6
D212	H-8	IC702	E-6
D701	D-4	IC707	F-4
D703	F-6	IC6001	G-1
D705	F-4	IC6002	I-4
D706	F-6	IC6003	I-7
D707	G-6	IC6007	H-5
D708	E-6	IC6010	I-8
D709	G-5	IC6011	E-4
D715	E-4	IC7001	D-6
D716	E-5	IC7002	A-3
D719	F-7	IC7005	D-3
D720	F-7	IC7006	D-5
D723	F-6	IC7007	D-6
D724	F-5	**TRANSISTOR**	
D725	G-6	Q203	I-12
D726	G-5	Q204	I-12
D727	G-5	Q207	H-12
D728	G-5	Q208	H-11
D6001	C-9	Q211	I-10
D6002	C-8	Q214	H-9
D6003	G-2	Q701	F-7
D6005	I-2	Q702	F-7
D6009	I-2	Q703	F-7
D6011	F-4	Q705	F-7
D6012	G-4	Q706	F-7
D6013	H-4	Q707	F-7
D6014	F-3	Q709	G-6
D6017	F-3	Q712	D-6
D6020	B-8	Q721	F-7
D7002	E-5	Q730	G-5
D7011	D-3	Q731	F-5
D7012	E-3	Q6007	G-2
D7014	C-1	Q6008	G-1
D7015	C-1		
D7016	B-4		
D7017	D-4		

A [TUNER, CRT DRIVE, U-COM, AC/DC POWER, AUDIO POWER]

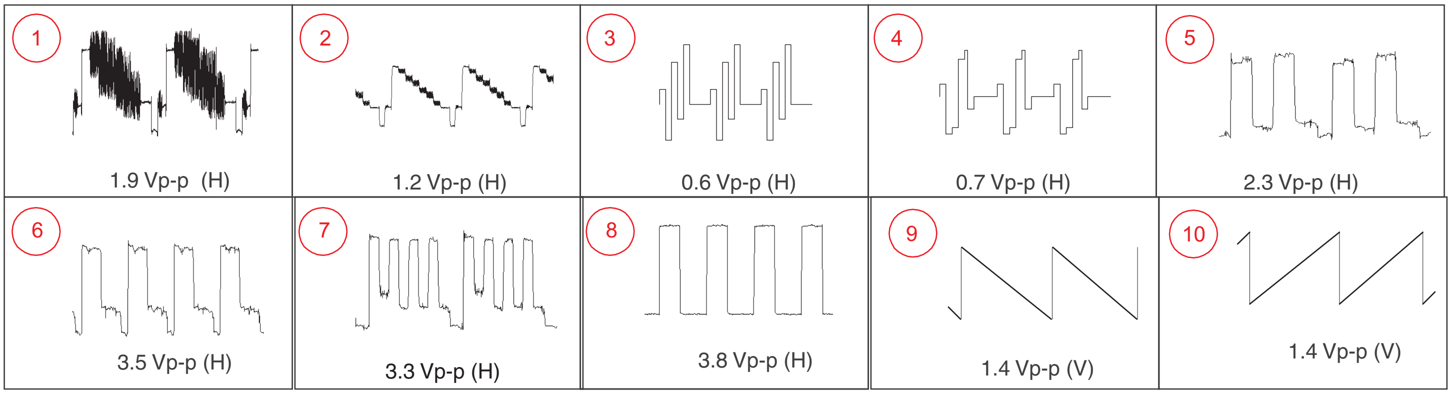
CONDUCTOR SIDE



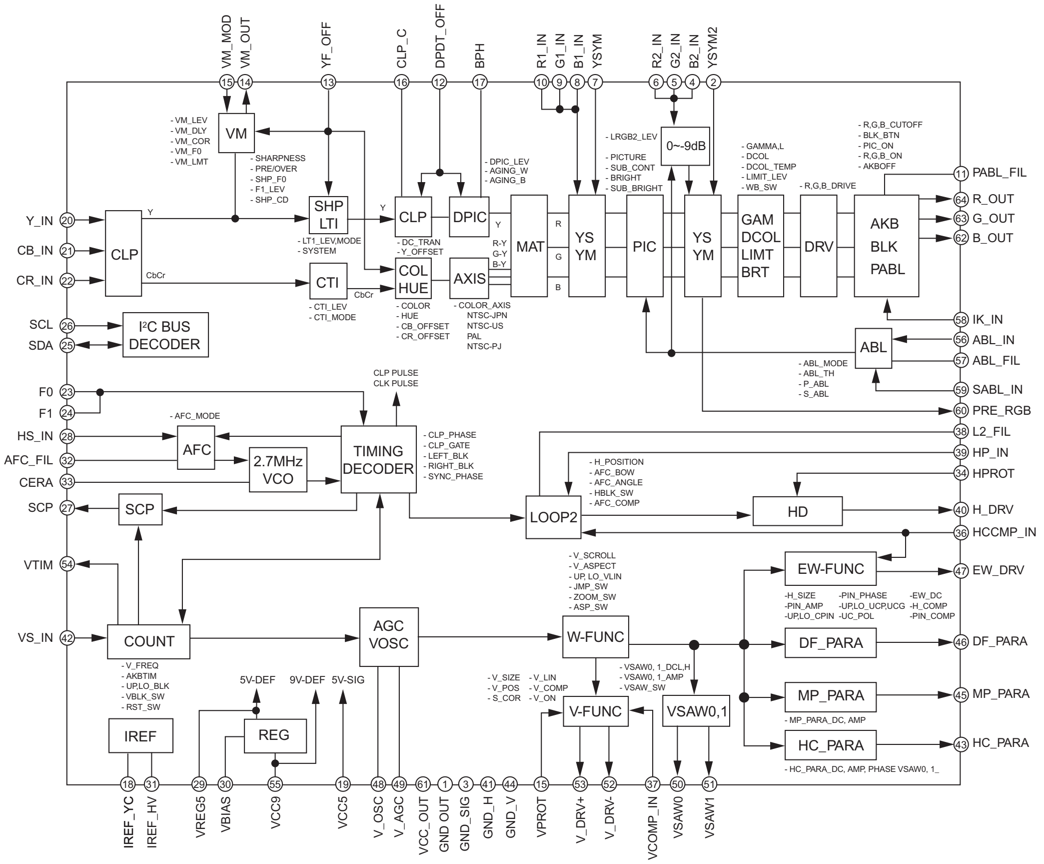
A BOARD LOCATOR LIST (CONDUCTOR SIDE)

DIODE		Q209	B-11
D004	F-7	Q212	B-10
D008	F-7	Q216	A-10
D214	B-10	Q217	A-11
D215	B-10	Q704	D-8
D710	D-7	Q710	F-1
D711	D-7	Q717	D-5
D721	F-1	Q723	D-7
D722	F-1	Q724	E-7
D6018	D-3	Q726	C-5
D6025	D-3	Q727	C-5
D7003	E-5	Q728	C-6
D7004	E-5	Q729	C-5
D7005	E-5	Q6001	G-9
D7009	H-4	Q6002	G-10
D7010	H-4	Q6009	B-7
D7013	F-5	Q6010	A-7
D7103	E-4	Q7001	E-5
TRANSISTOR		Q7004	H-4
Q001	F-7	Q7005	I-4
Q002	F-7	Q7009	F-4
Q004	D-9	Q7010	F-4
Q005	H-6	Q7013	H-4
Q012	D-10	Q7014	H-4
Q015	D-10	Q7015	F-4
Q027	H-6	Q7016	E-4

A BOARD WAVEFORMS



A BOARD: IC 201 CXA2150AQ



(*) A BOARD VARIANT MODEL LIST

REF. NO.	LOCATION	KV-38DRC2	KV-38DRC2C
C6028	H-2	#	0.0047μF 250V
C6029	G-2	0.47μF 125V	0.47μF 300V
FB6013	E-1	0μH	#
FB6014	E-2	#	0μH
JW6001	G-5	15MM	#
R6003	G-4	2.2M 1/2W	8.2M 1W
R6041	G-4	0.47 20W	1 20W
R6042	H-4	0.47 20W	1 20W
R6060	E-2	#	3.3 10W
R6061	E-2	#	3.3 10W
T6002	D-3	1-435-675-11	1-435-676-11
TH6002	F-2	1-803-970-11	1-803-540-11
VDR6001	G-2	ERZV10D271	ENE471D-14A

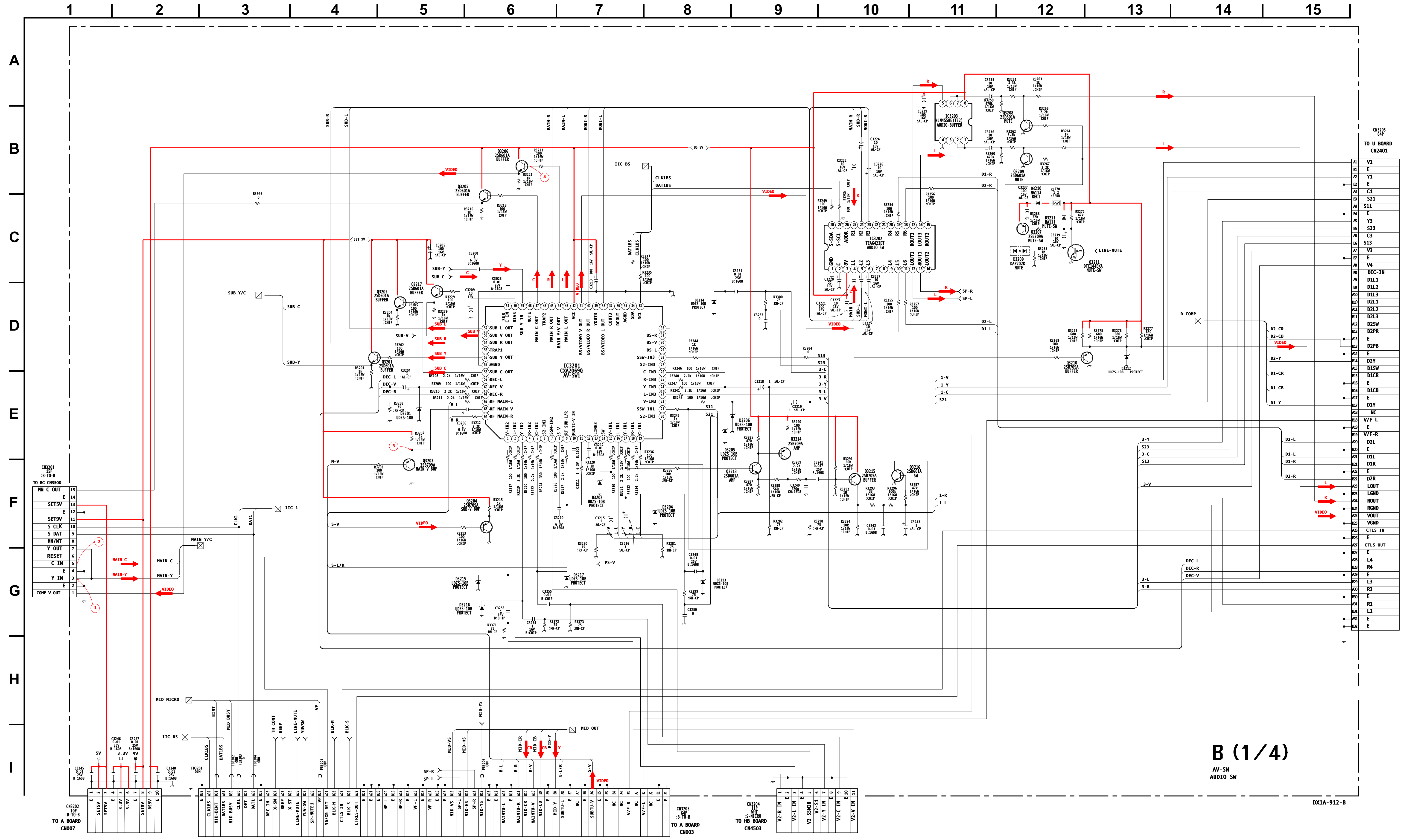
NOTE: # = Not Mounted

A BOARD IC VOLTAGE LIST

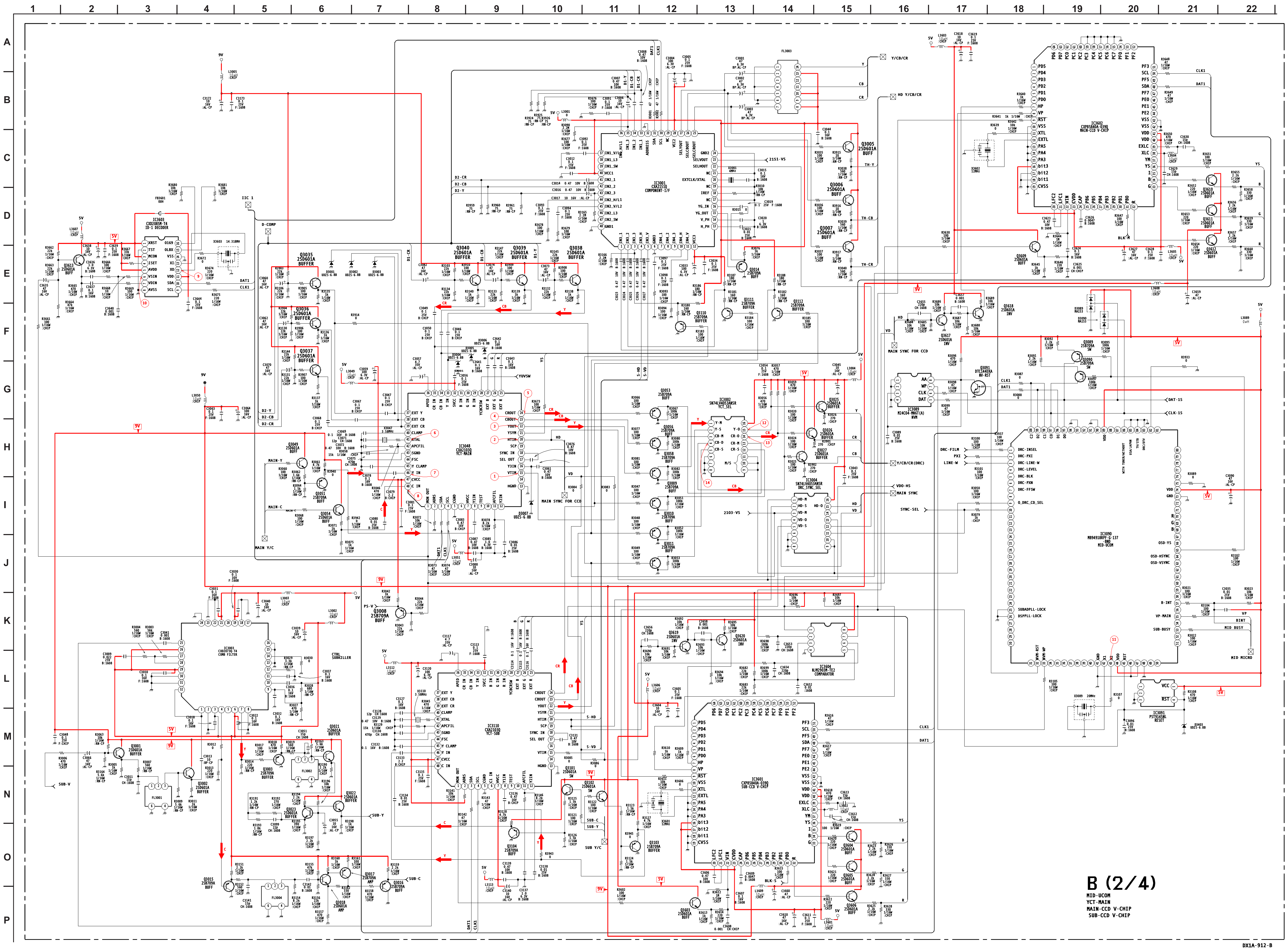
IC201		47	3.9	29	4.9	77	0.0	6	0.0	9	4.4	9	23.7
PIN	**VOLT**	48	4.4	30	4.9	78	0.0	7	4.6	10	4.4	10	0.0
1	GND	49	5.4	31	4.4	79	0.0	8	17.3	11	4.4	11	4.2
2	0.0	50	3.5	32	0.0	80	N/C	9	0.0	12	4.4	12	10.5
3	GND	51	3.8	33	0.0	81	0.0	10	10.4	13	0.8	**IC7006**	
4	3.1	52	3.4	34	0.0	82	0.0	11	GND	14	1.9	**PIN**	**VOLT**
5	3.1	53	3.5	35	N/C	83	0.0	12	4.7	15	9.0	1	4.5
6	3.1	54	1.0	36	0.0	84	0.0	13	N/C	16	9.0	2	4.5
7	0.0	55	9.0	37	4.6	85	0.0	14	160.6	17	4.5	3	4.5
8	3.6	56	1.0	38	0.0	86	N/C	15	150.4	18	4.6	4	GND
9	3.6	57	4.3	39	0.0	87	0.0	16	154.6	19	1.9	5	4.5
10	3.6	58	3.9	40	0.0	88	0.0	17	N/C	20	0.8	6	4.5
11	0.0	59	1.7	41	2.3	89	0.0	18	303.1	21	4.4	7	4.5
12	0.5	60	1.7	42	0.0	90	0.0	**IC6002**		22	4.4	8	9.0
13	0.5	61	9.0	43	4.6	91	0.0	**PIN**	**VOLT**	23	4.4	**IC7007**	
14	2.3	62	2.3	44	2.8	92	0.0	1	7.3	24	4.4	**PIN**	**VOLT**
15	3.7	63	2.5	45	0.1	93	0.0	2	GND	25	4.4	1	4.5
16	2.7	64	2.3	46	0.0	94	4.6	3	2.5	26	4.4	2	4.5
17	2.6	**IC701**		47	4.6	95	4.6	**IC6003**		27	4.4	3	4.1
18	1.1	**PIN**	**VOLT**	48	5.0	96	GND	**PIN**	**VOLT**	28	4.4	4	GND
19	4.9	1	N/C	49	5.0	97	4.6	I	5.7	29	4.4	5	4.5
20	3.6	2	N/C	50	0.0	98	GND	G	GND	30	4.5	6	4.5
21	3.4	3	0.0	51	5.0	99	4.9	O	3.3	31	2.8	7	4.5
22	3.4	4	0.0	52	0.0	100	4.6	**IC6007**		32	4.4	8	9.0
23	GND	5	0.0	53	3.0	**IC702**		**PIN**	**VOLT**	**IC7002**			
24	N/C	6	0.0	54	0.0	**PIN**	**VOLT**	I	6.3	**PIN**	**VOLT**		
25	4.6	7	4.7	55	0.0	1	N/C	G	GND	1	1.6		
26	4.6	8	GND	56	N/C	2	GND	O	5.0	2	0.0		
27	0.7	9	GND	57	N/C	3	GND	**IC6010**		3	GND		
28	0.0	10	N/C	58	0.0	4	4.9	**PIN**	**VOLT**	4	0.0		
29	5.0	11	N/C	59	0.0	5	4.9	I	10.9	5	1.6		
30	5.6	12	4.9	60	0.0	**IC707**		G	GND	6	8.0		
31	1.3	13	2.3	61	0.0	**PIN**	**VOLT**	O	9.0	7	4.0		
32	3.0	14	GND	62	4.9	1	GND	**IC6011**		8	5.0		
33	1.6	15	2.4	63	4.9	2	GND	**PIN**	**VOLT**	9	23.7		
34	0.0	16	4.9	64	GND	3	GND	I	7.0	10	0.0		
35	0.0	17	0.0	65	0.0	4	GND	G	GND	11	4.1		
36	0.2	18	0.0	66	N/C	5	4.6	O	5.0	12	10.5		
37	0.0	19	0.0	67	0.0	6	4.6	**IC7001**		**IC7005**			
38	3.2	20	N/C	68	0.0	7	5.0	**PIN**	**VOLT**	**PIN**	**VOLT**		
39	1.1	21	0.0	69	7.3	8	5.0	1	GND	1	1.6		
40	2.8	22	0.0	70	0.0	**IC6001**		2	0.0	2	0.0		
41	GND	23	0.0	71	N/C	**PIN**	**VOLT**	3	4.5	3	GND		
42	0.0	24	GND	72	6.3	1	3.3	4	4.4	4	0.0		
43	3.8	25	0.0	73	0.0	2	1.8	5	4.4	5	1.6		
44	GND	26	N/C	74	0.0	3	2.2	6	4.4	6	8.0		
45	2.8	27	N/C	75	GND	4	2.5	7	4.4	7	11.0		
46	3.6	28	4.4	76	0.0	5	GND	8	4.4	8	5.0		

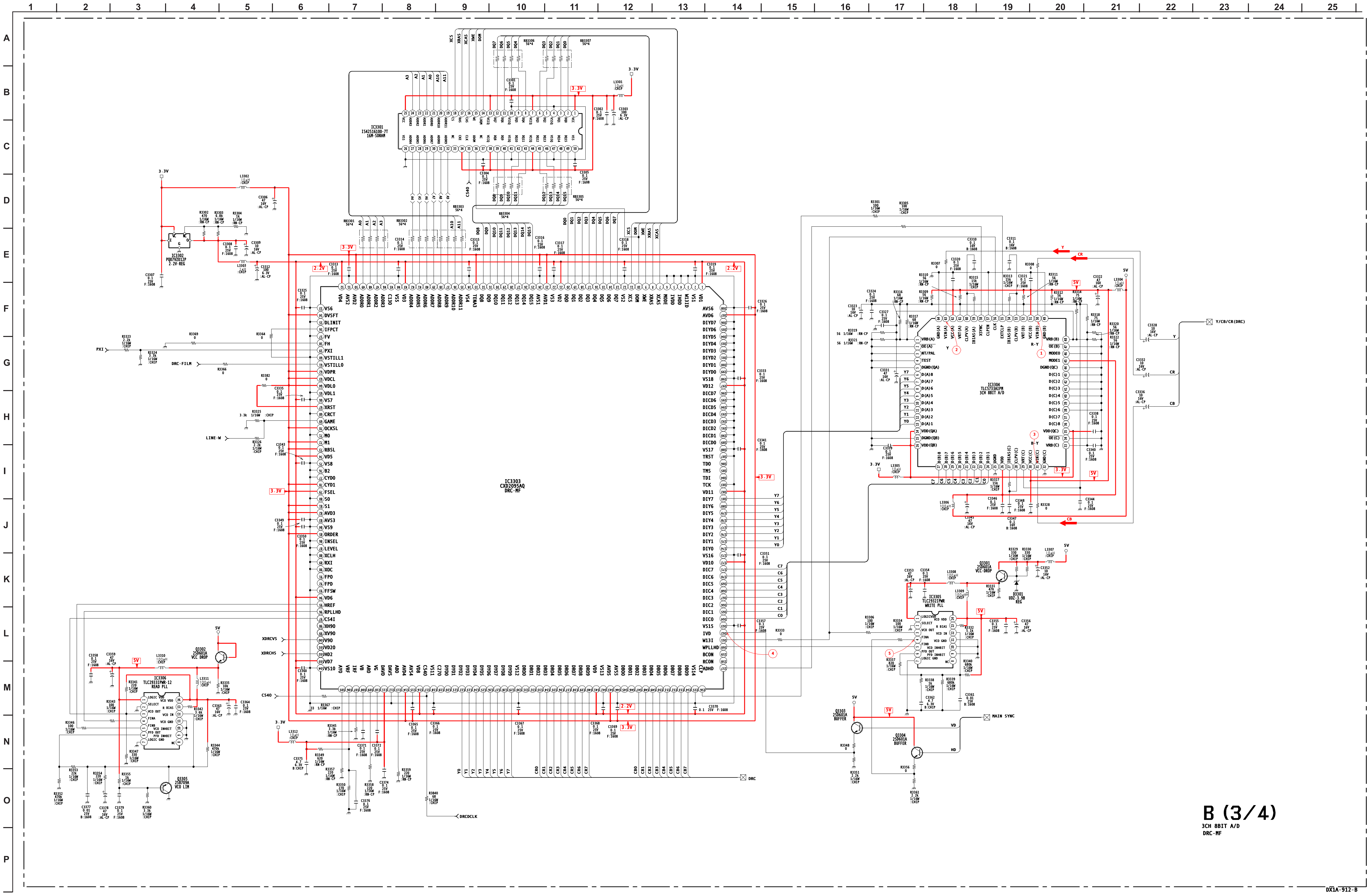
All voltages are in V.

B BOARD SCHEMATIC DIAGRAM (1 OF 4)

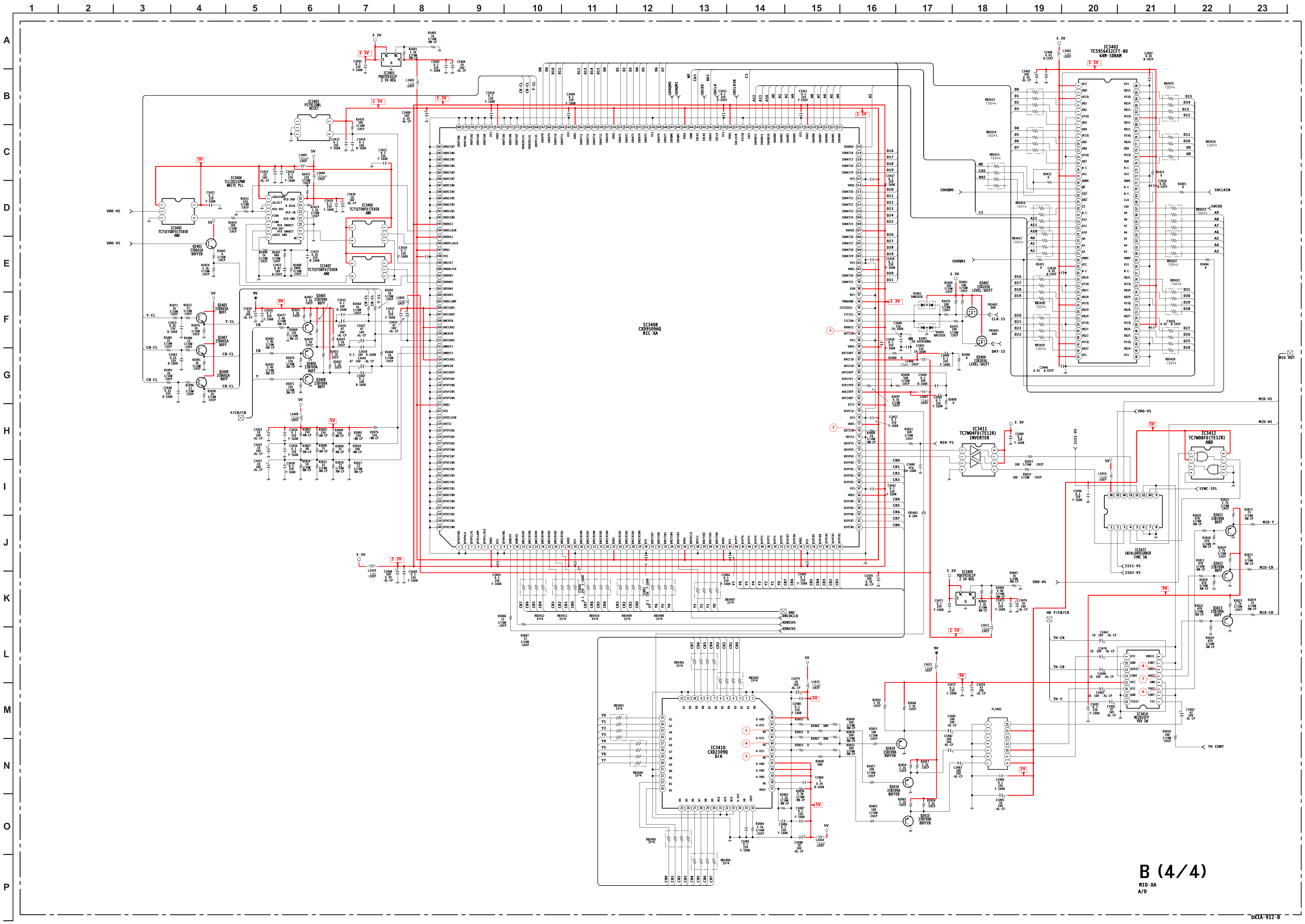


B BOARD SCHEMATIC DIAGRAM (2 OF 4)



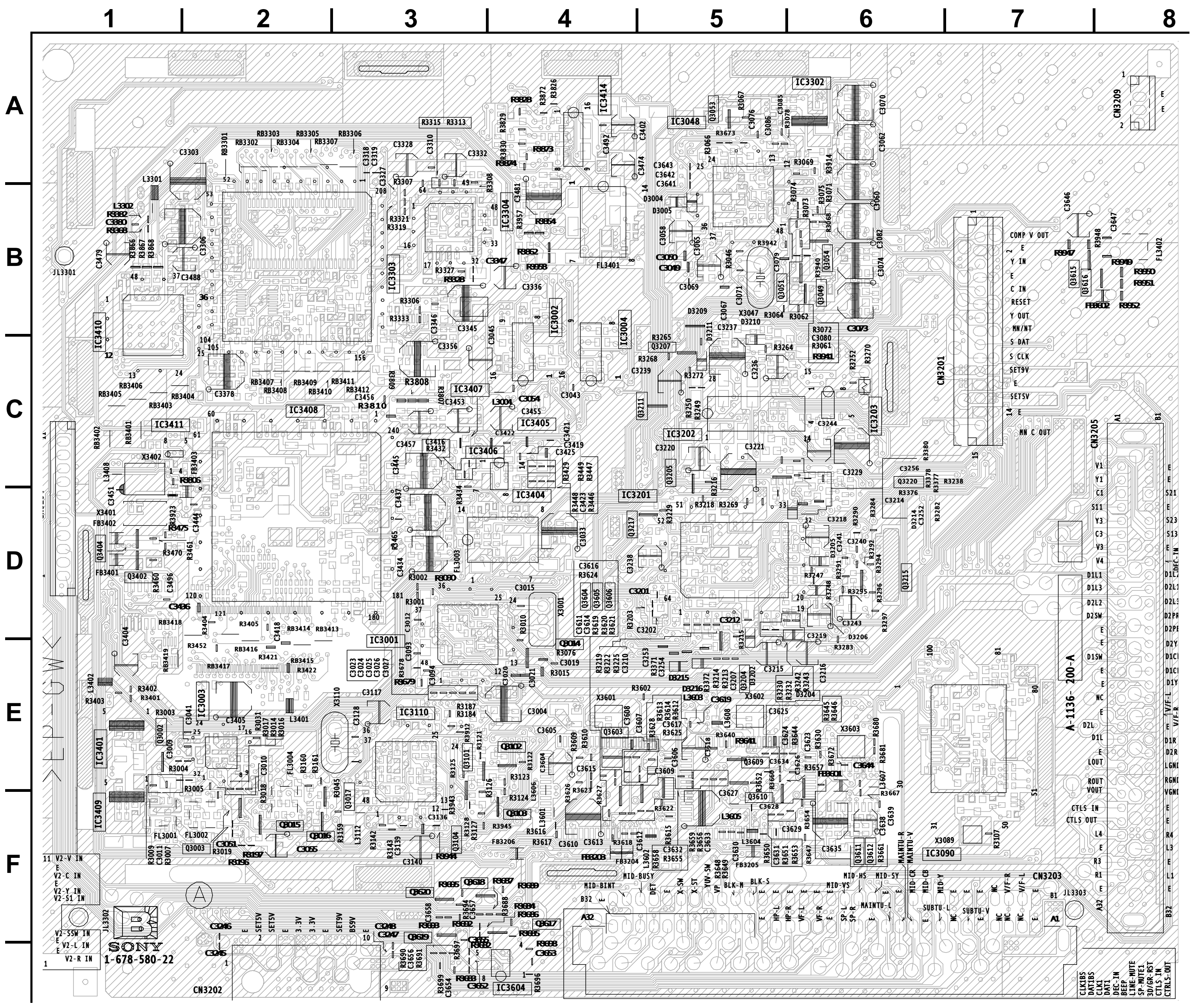

IC3301
IS42S16100-7T
16M-SDRAM
IC3303
CXD2095AQ
DRC-MF
IC3304
TLC5733AIPM
3CH 8BIT A/D
IC3302
PQ07VZ012P
2.7V-REG
IC3306
TLC2933IPWR-12
READ PLL
IC3305
TLC2933IPWR
WRITE PLL
Q3302
2SD601A
VCC DROP
Q3305
2SB709A
VCO LIM
Q3301
2SD601A
VCC DROP
Q3303
2SD601A
BUFFER
Q3304
2SD601A
BUFFER
PXI
DRC-FILM
LINE-W
XDRCVS
XDRCHS
CS40
DRCDCLK
DRC
Y/CB/CR(DRC)
MAIN SYNC
B (3/4)
3CH 8BIT A/D
DRC-MF

B BOARD SCHEMATIC DIAGRAM (4 OF 4)

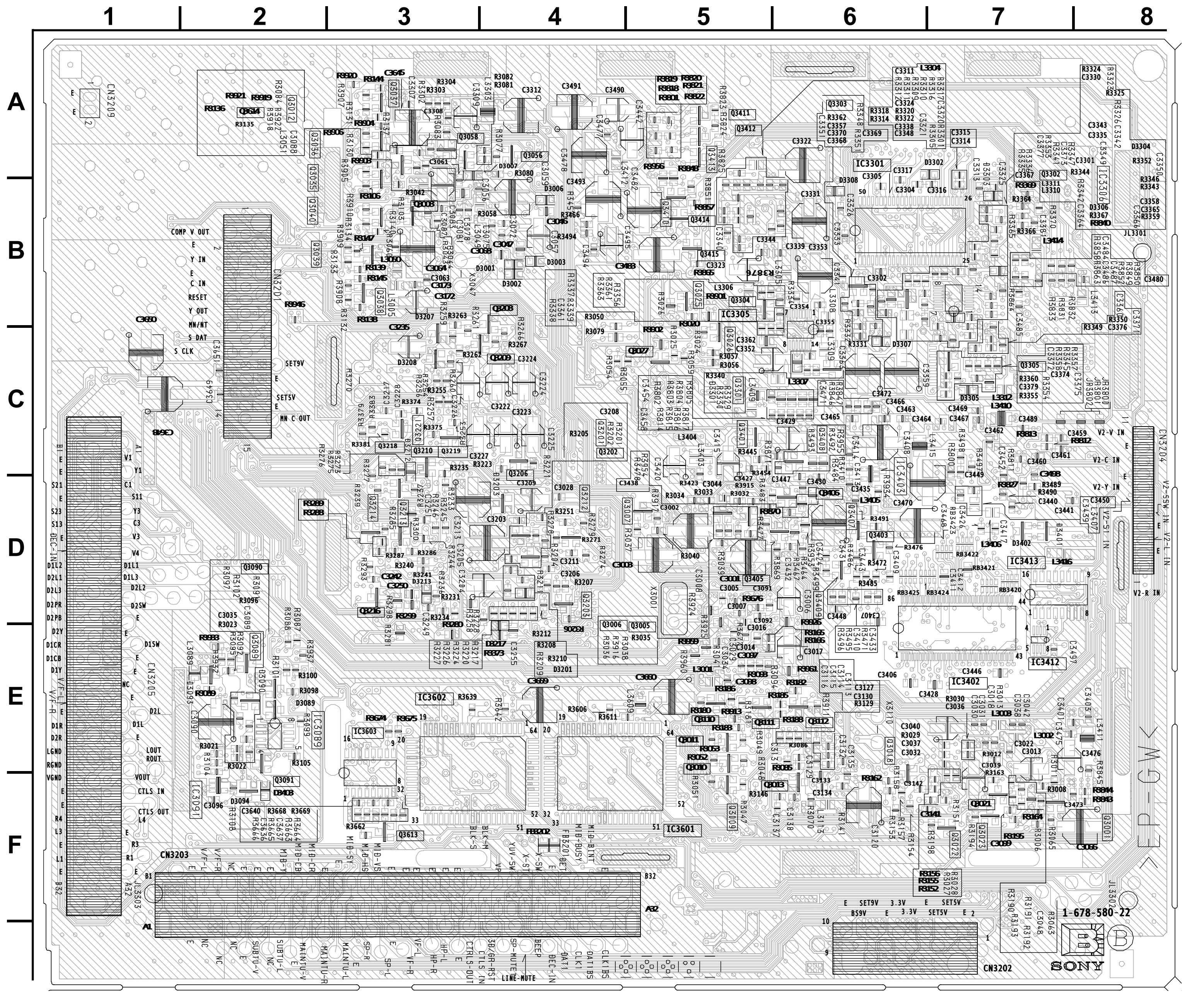


B [AV-SW1, AUDIO SW, MID-UCOM, YCT-MAIN, MAIN-CCD V-CHIP, SUB-CCD V-CHIP, 3CH 8 BIT A/D, DRC-MF, MID-XA, A/D]

COMPONENT SIDE



CONDUCTOR SIDE



B BOARD LOCATOR LIST (COMPONENT SIDE)

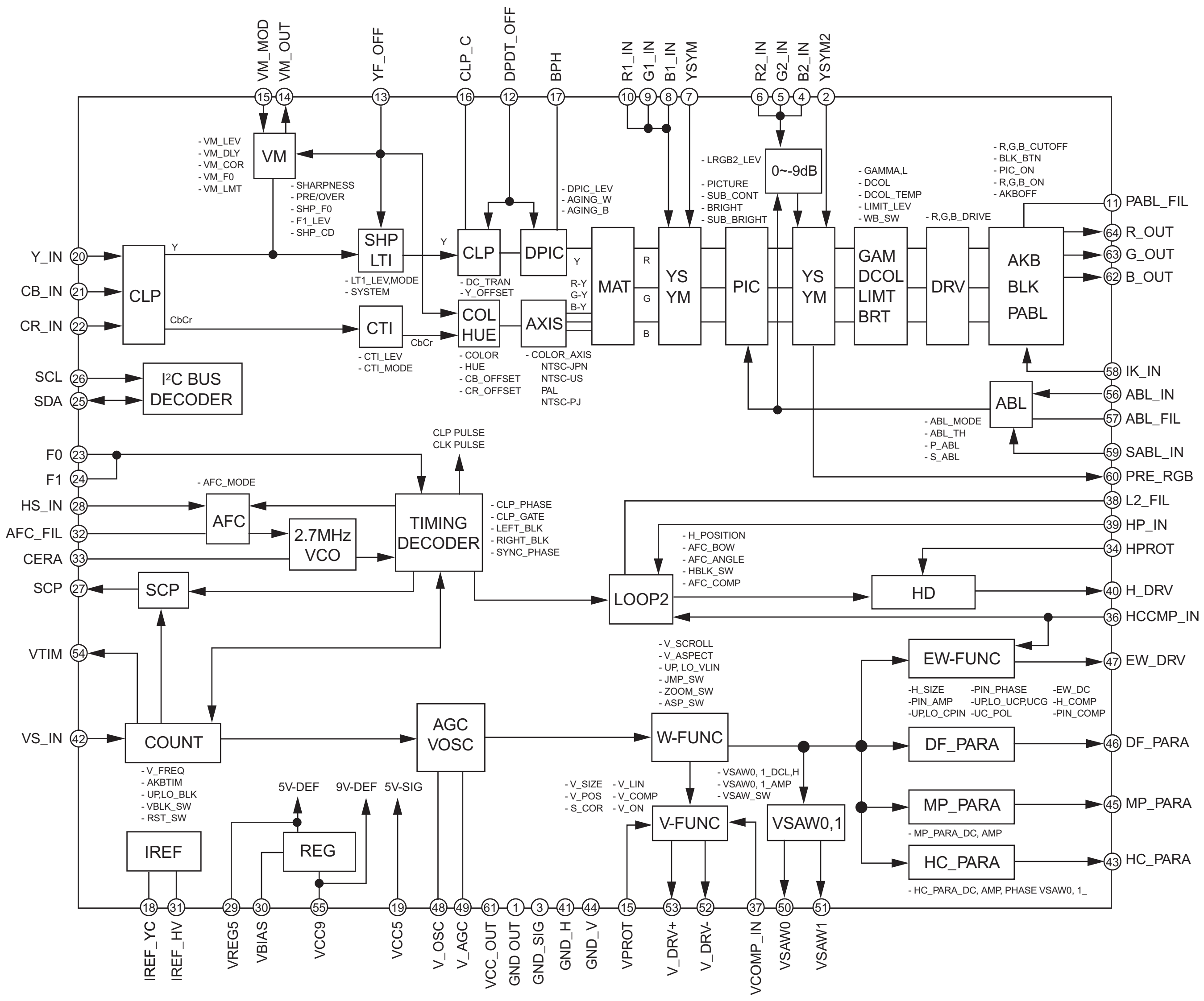
DIODE		IC		IC3304	B-4	TRANSISTOR		Q3102	E-4	Q3604	D-4	CRYSTAL	
D3004	B-5	IC3001	E-3	IC3401	E-1	Q3002	E-1	Q3103	F-4	Q3605	D-4	X3001	D-4
D3005	B-5	IC3002	B-4	IC3404	D-4	Q3003	F-2	Q3104	F-3	Q3606	D-4	X3047	B-5
D3202	E-5	IC3003	E-2	IC3405	C-4	Q3014	E-4	Q3204	E-5	Q3609	E-5	X3089	F-7
D3204	E-6	IC3004	C-5	IC3406	C-4	Q3015	F-2	Q3205	C-5	Q3610	F-5	X3110	E-2
D3205	D-6	IC3048	A-5	IC3407	C-4	Q3016	F-2	Q3207	C-5	Q3611	F-6	X3401	D-1
D3206	E-6	IC3090	F-7	IC3408	C-2	Q3017	F-3	Q3211	C-5	Q3612	F-6	X3601	E-4
D3209	B-5	IC3110	E-3	IC3409	F-1	Q3049	B-6	Q3215	D-6	Q3617	F-4	X3602	E-6
D3210	B-5	IC3201	D-5	IC3410	C-1	Q3051	B-6	Q3217	D-5	Q3618	F-4	X3603	E-6
D3211	B-5	IC3202	C-5	IC3411	C-2	Q3053	A-5	Q3402	D-1	Q3619	G-3		
D3214	D-6	IC3203	C-6	IC3414	A-4	Q3054	B-6	Q3404	D-1	Q3620	F-3		
D3215	E-5	IC3302	A-6	IC3604	G-4	Q3101	E-4	Q3603	E-4				
D3216	E-5	IC3303	B-3										

B BOARD LOCATOR LIST (CONDUCTOR SIDE)

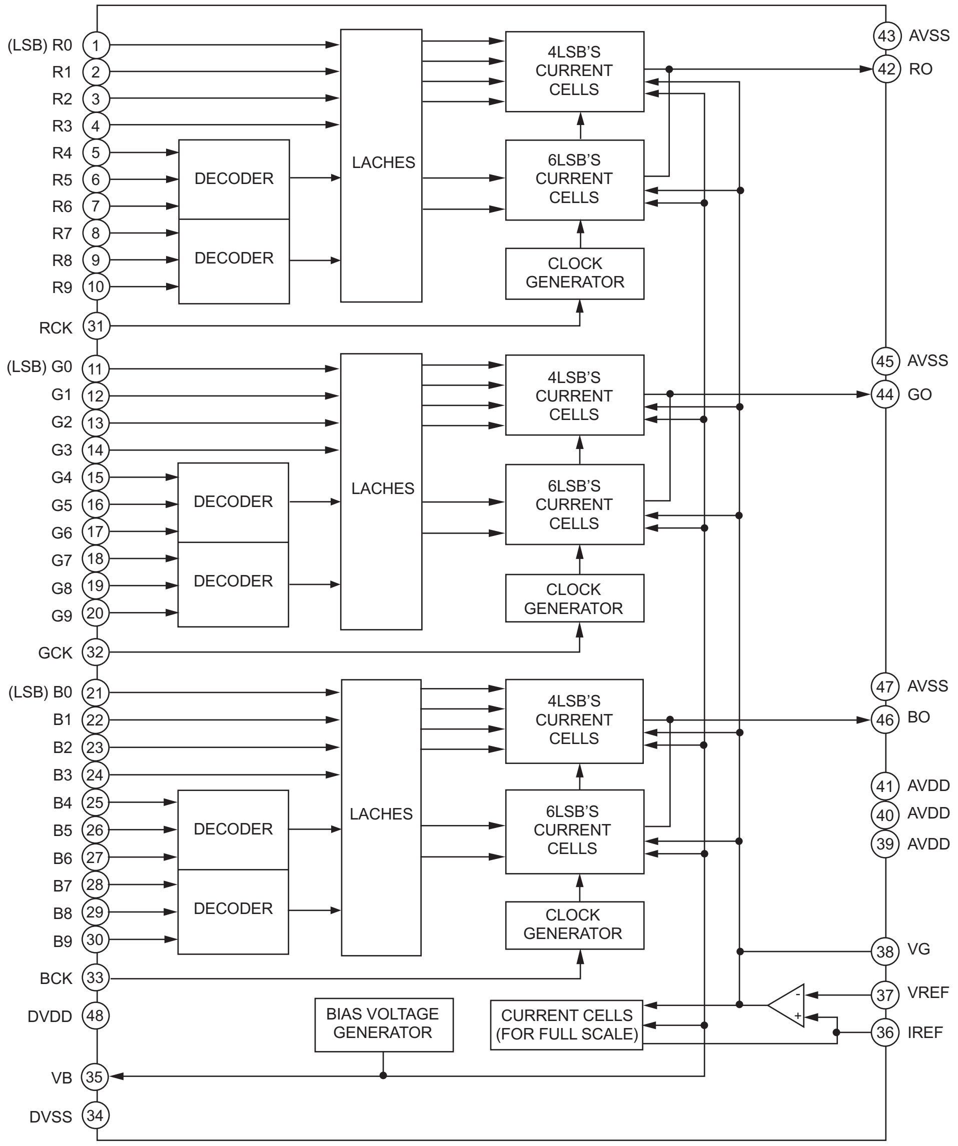
DIODE		D3401	D-7	IC3412	E-8	Q3010	E-5	Q3038	B-3	Q3202	C-4	Q3304	B-5	Q3413	A-5
D3001	B-4	D3402	D-7	IC3413	D-7	Q3011	E-5	Q3039	B-2	Q3203	D-4	Q3305	C-7	Q3414	B-5
D3002	B-4	D3403	F-2	IC3601	F-5	Q3018	E-6	Q3040	B-2	Q3206	C-4	Q3401	C-5	Q3415	B-5
D3003	B-4	D3217	E-4	IC3602	E-3	Q3021	F-7	Q3056	A-4	Q3208	B-4	Q3403	D-6	Q3613	F-3
D3006	B-4	IC		IC3603	E-3	Q3022	F-7	Q3058	A-3	Q3209	C-4	Q3405	D-5		
D3007	B-4	IC3089	E-2	TRANSISTOR		Q3023	F-7	Q3089	E-2	Q3210	C-3	Q3406	D-6		
D3089	E-2	IC3091	F-2	Q3001	F-8	Q3025	B-5	Q3090	D-2	Q3213	D-3	Q3407	D-6		
D3090	E-2	IC3301	B-6	Q3005	E-5	Q3026	B-5	Q3091	F-2	Q3214	D-3	Q3408	C-6		
D3201	E-4	IC3305	B-5	Q3006	E-5	Q3027	B-5	Q3110	E-5	Q3216	D-3	Q3409	D-6		
D3212	C-3	IC3306	B-8	Q3007	D-5	Q3035	B-2	Q3111	E-5	Q3301	C-5	Q3410	B-5		
D3213	D-3	IC3402	E-7	Q3008	B-3	Q3036	A-2	Q3112	E-6	Q3302	A-7	Q3411	A-5		
D3301	C-5	IC3403	C-6	Q3009	F-5	Q3037	A-3	Q3201	C-4	Q3303	A-6	Q3412	A-5		

IC DIAGRAMS

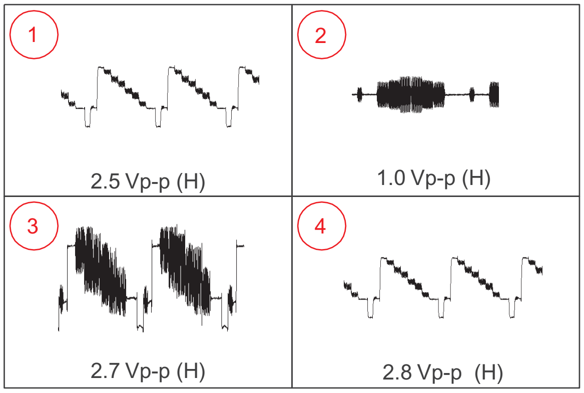
B BOARD: IC3001 CXA2151Q



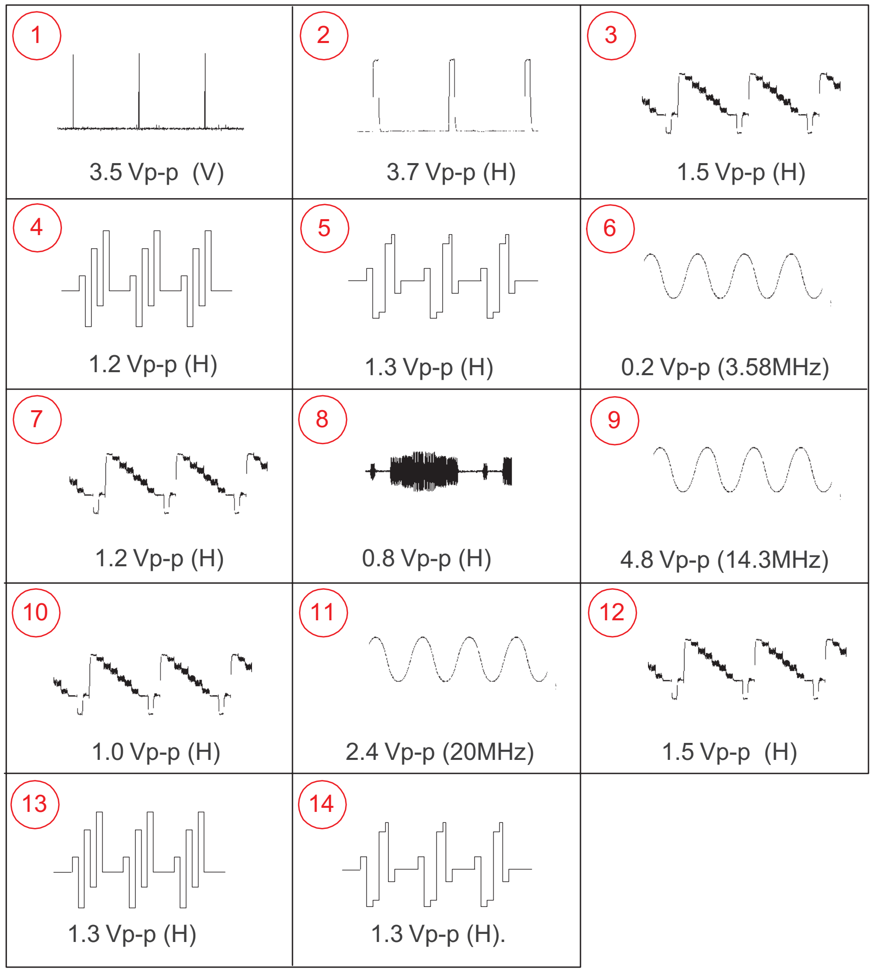
B BOARD: IC3410 CXD2309Q



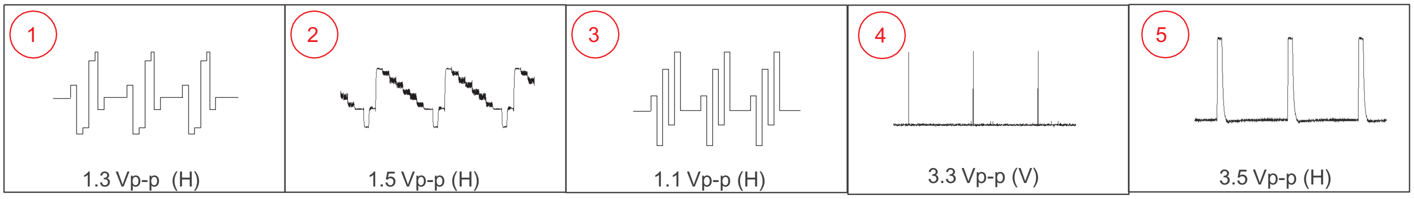
B BOARD WAVEFORMS (SCHEMATIC 1 OF 4)



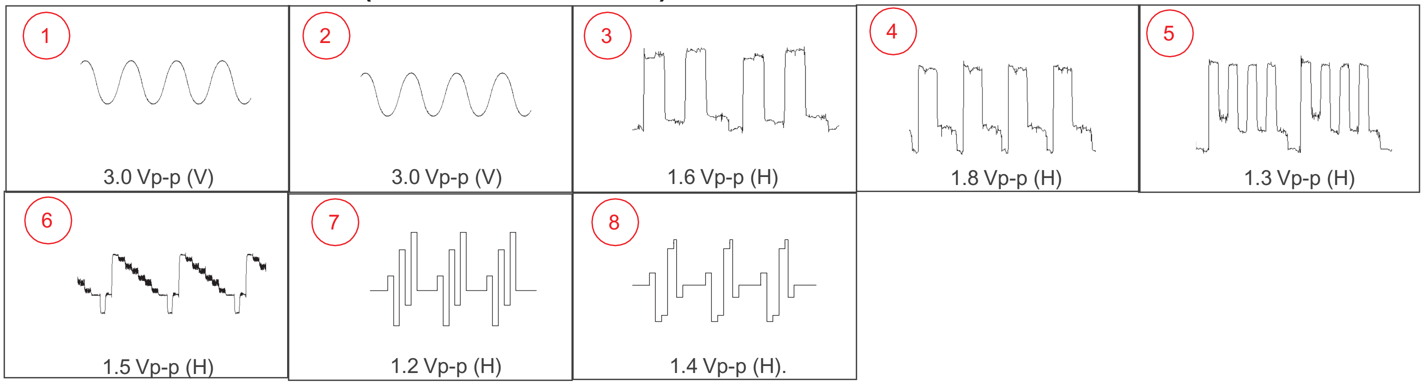
B BOARD WAVEFORMS (SCHEMATIC 2 OF 4)



B BOARD WAVEFORMS (SCHEMATIC 3 OF 4)



B BOARD WAVEFORMS (SCHEMATIC 4 OF 4)



B BOARD TRANSISTOR VOLTAGE LIST

	B	C	E		B	C	E		B	C	E
Q3001	4.1	9.0	3.4	Q3056	2.1	GND	2.8	Q3304	0.5	4.9	0.2
Q3002	5.1	9.0	5.7	Q3058	1.9	GND	2.5	Q3305	3.2	GND	2.3
Q3003	1.8	GND	5.4	Q3089	4.1	4.7	4.7	Q3401	0.0	4.9	0.0
Q3005	2.2	4.9	1.6	Q3090	4.1	4.7	4.7	Q3402	4.6	3.3	3.1
Q3006	2.9	4.9	2.2	Q3091	0.0	8.9	GND	Q3403	1.0	4.9	0.5
Q3007	2.9	4.8	2.3	Q3101	3.7	9.0	3.1	Q3404	4.6	3.3	3.1
Q3008	1.0	GND	1.6	Q3102	2.8	9.0	2.2	Q3405	2.3	GND	3.0
Q3009	2.0	GND	0.0	Q3103	1.1	GND	1.7	Q3406	2.3	GND	3.0
Q3010	2.0	GND	0.0	Q3104	1.5	GND	2.1	Q3407	1.7	4.9	1.2
Q3011	1.2	GND	0.0	Q3110	0.8	GND	1.5	Q3408	2.3	GND	3.0
Q3014	2.7	GND	3.3	Q3111	1.2	GND	1.8	Q3409	1.7	4.9	1.2
Q3015	1.0	GND	1.6	Q3112	1.2	GND	1.8	Q3410	0.5	GND	1.2
Q3016	1.1	GND	1.7	Q3201	4.6	2.9	2.5	Q3411	1.5	GND	2.2
Q3017	4.1	4.8	0.7	Q3202	2.7	9.0	2.3	Q3412	1.5	GND	2.2
Q3018	1.5	4.1	0.9	Q3203	3.1	GND	3.7	Q3413	1.5	GND	2.2
Q3021	2.9	9.0	0.7	Q3204	1.8	GND	2.2	Q3414	0.8	GND	1.5
Q3022	7.9	9.0	0.0	Q3205	4.4	9.0	3.8	Q3415	1.4	GND	2.0
Q3023	0.7	7.9	0.3	Q3206	4.9	9.0	4.3	Q3603	1.0	4.9	0.3
Q3025	2.5	5.0	1.4	Q3207	8.9	-1.0	8.9	Q3604	0.0	9.0	0.0
Q3026	2.7	5.0	1.4	Q3208	-0.3	0.0	GND	Q3605	0.0	9.0	0.0
Q3027	2.8	5.0	1.4	Q3209	-0.3	0.0	GND	Q3606	0.0	9.0	0.0
Q3035	5.1	9.0	4.3	Q3210	2.7	GND	3.1	Q3609	1.9	4.9	1.3
Q3036	5.1	9.0	4.3	Q3211	0.4	8.9	GND	Q3610	0.0	9.0	0.0
Q3037	5.1	9.0	4.3	Q3213	3.8	7.9	3.2	Q3611	0.0	9.0	0.0
Q3038	4.9	9.0	4.1	Q3214	7.9	5.8	8.5	Q3612	0.0	9.0	0.0
Q3039	4.9	9.0	4.1	Q3215	8.5	0.0	9.0	Q3613	3.7	4.9	3.0
Q3040	4.9	9.0	4.1	Q3216	0.1	4.9	GND	Q3617	0.5	4.7	GND
Q3049	5.3	8.9	4.7	Q3217	3.6	9.0	3.1	Q3618	0.2	4.7	GND
Q3051	2.3	GND	3.0	Q3301	3.9	4.9	3.4	Q3619	0.5	0.1	GND
Q3053	2.0	GND	2.6	Q3302	4.9	4.9	3.4	Q3620	0.2	0.2	GND
Q3054	5.7	8.9	5.1	Q3303	0.5	4.9	0.1				

All voltages are in V.

B BOARD IC VOLTAGE LIST (1 OF 5)

IC3001		3	2.7	5	0.0	41	1.7	35	N/C	89	5.0	34	N/C
PIN	**VOLT**	4	2.8	6	GND	42	2.4	36	N/C	90	GND	35	N/C
1	3.2	5	0.0	7	GND	43	GND	37	N/C	91	N/C	36	2.6
2	3.2	6	GND	8	GND	44	N/C	38	N/C	92	N/C	37	N/C
3	3.2	7	GND	9	4.9	45	3.1	39	N/C	93	GND	38	N/C
4	1.2	8	GND	10	4.9	46	2.8	40	N/C	94	N/C	39	N/C
5	1.0	9	4.9	11	0.0	47	4.8	41	GND	95	2.9	40	1.7
6	GND	10	4.9	12	0.3	48	3.1	42	0.0	96	0.0	41	1.8
7	N/C	11	4.9	13	0.6	**IC3089**		43	5.0	97	2.9	42	2.4
8	N/C	12	0.1	14	0.3	**PIN**	**VOLT**	44	5.0	98	4.3	43	0.0
9	N/C	13	2.6	15	0.6	1	GND	45	4.9	99	2.9	44	2.4
10	1.0	14	2.7	16	4.9	2	GND	46	GND	100	4.3	45	3.4
11	0.9	15	2.5	**IC3048**		3	0.0	47	GND	**IC3091**		46	2.4
12	4.8	16	4.9	**PIN**	**VOLT**	4	GND	48	GND	**PIN**	**VOLT**	47	4.8
13	4.0	**IC3003**		1	1.7	5	4.6	49	N/C	1	N/C	48	3.1
14	4.0	**PIN**	**VOLT**	2	0.2	6	4.6	50	N/C	2	GND		
15	2.7	1	1.0	3	4.6	7	4.9	51	N/C	3	GND		
16	2.3	2	GND	4	4.6	8	4.9	52	N/C	4	4.9		
17	1.0	3	4.8	5	GND	**IC3090**		53	0.0	5	4.9		
18	2.8	4	1.0	6	N/C	**PIN**	**VOLT**	54	N/C	**IC3110**			
19	0.0	5	N/C	7	4.9	1	0.0	55	0.0	**PIN**	**VOLT**		
20	2.7	6	4.8	8	2.8	2	0.0	56	N/C	1	1.0		
21	0.0	7	0.5	9	N/C	3	0.0	57	0.0	2	4.6		
22	0.3	8	GND	10	N/C	4	N/C	58	N/C	3	4.6		
23	0.0	9	1.9	11	2.3	5	N/C	59	N/C	4	4.6		
24	GND	10	2.6	12	N/C	6	N/C	60	N/C	5	GND		
25	2.9	11	0.9	13	GND	7	N/C	61	N/C	6	N/C		
26	2.8	12	2.0	14	N/C	8	N/C	62	N/C	7	4.9		
27	2.2	13	GND	15	0.5	9	0.0	63	N/C	8	2.6		
28	4.8	14	0.0	16	2.4	10	0.0	64	N/C	9	N/C		
29	GND	15	GND	17	2.0	11	N/C	65	2.6	10	N/C		
30	4.6	16	GND	18	3.1	12	N/C	66	N/C	11	2.4		
31	4.6	17	N/C	19	N/C	13	N/C	67	N/C	12	N/C		
32	GND	18	GND	20	0.5	14	N/C	68	N/C	13	GND		
33	3.1	19	4.9	21	0.0	15	N/C	69	N/C	14	N/C		
34	3.1	20	N/C	22	1.8	16	N/C	70	N/C	15	0.5		
35	3.1	21	4.9	23	2.1	17	N/C	71	N/C	16	N/C		
36	3.2	22	GND	24	2.0	18	N/C	72	N/C	17	1.6		
37	3.2	23	N/C	25	3.4	19	N/C	73	GND	18	2.8		
38	N/C	24	GND	26	3.4	20	N/C	74	5.0	19	N/C		
39	N/C	25	2.4	27	3.4	21	N/C	75	GND	20	0.5		
40	4.8	26	4.8	28	0.0	22	N/C	76	N/C	21	0.0		
41	3.1	27	2.2	29	N/C	23	N/C	77	N/C	22	1.2		
42	3.1	28	2.2	30	N/C	24	N/C	78	N/C	23	2.0		
43	3.1	29	4.8	31	N/C	25	GND	79	N/C	24	1.9		
44	3.3	30	GND	32	4.8	26	GND	80	N/C	25	3.4		
45	3.2	31	GND	33	3.4	27	N/C	81	N/C	26	3.4		
46	N/C	32	1.0	34	3.1	28	N/C	82	GND	27	3.4		
47	N/C	**IC3004**		35	0.0	29	N/C	83	GND	28	N/C		
48	GND	**PIN**	**VOLT**	36	2.6	30	N/C	84	GND	29	N/C		
IC3002		1	0.6	37	3.4	31	N/C	85	GND	30	N/C		
PIN	**VOLT**	2	0.5	38	3.1	32	0.0	86	GND	31	N/C		
1	2.4	3	0.5	39	3.1	33	0.0	87	N/C	32	4.8		
2	0.0	4	0.5	40	1.7	34	N/C	88	N/C	33	N/C		

All voltages are in V.

B BOARD IC VOLTAGE LIST (2 OF 5)

IC3201				IC3301		IC3302									
		52	4.5					44	GND	96	2.0	148	1.6	200	GND
PIN	**VOLT**	53	3.8	**PIN**	**VOLT**	**PIN**	**VOLT**	45	N/C	97	1.3	149	2.2	201	GND
1	3.9	54	4.5	1	3.3	I	3.3	46	0.0	98	N/C	150	2.4	202	GND
2	4.4	55	N/C	2	1.5	G	GND	47	0.0	99	N/C	151	2.3	203	GND
3	3.9	56	3.4	3	1.6	O	2.2	48	0.0	100	0.0	152	2.3	204	GND
4	4.4	57	GND	4	GND	VC	3.3	49	0.0	101	N/C	153	2.0	205	GND
5	4.4	58	4.3	5	1.5	NC	0.0	50	3.3	102	0.2	154	1.2	206	GND
6	N/C	59	4.4	6	1.5	**IC3303**		51	GND	103	2.2	155	GND	207	3.3
7	4.9	60	3.9	7	3.3	**PIN**	**VOLT**	52	2.2	104	GND	156	1.6	208	GND
8	4.0	61	4.4	8	1.9	1	2.2	53	GND	105	0.4	157	3.3		
9	4.5	62	4.4	9	1.8	2	GND	54	3.3	106	1.0	158	N/C		
10	4.4	63	4.8	10	GND	3	GND	55	GND	107	1.0	159	N/C		
11	4.5	64	4.4	11	1.2	4	GND	56	GND	108	1.0	160	0.8		
12	4.4	**IC3202**		12	0.5	5	GND	57	GND	109	0.5	161	0.9		
13	N/C	**PIN**	**VOLT**	13	3.3	6	GND	58	GND	110	2.2	162	0.0		
14	N/C	1	GND	14	3.2	7	1.9	59	0.0	111	3.3	163	GND		
15	4.4	2	4.4	15	3.2	8	2.0	60	GND	112	GND	164	1.4		
16	4.4	3	9.0	16	3.2	9	2.0	61	0.0	113	0.5	165	1.9		
17	3.9	4	4.4	17	3.2	10	0.3	62	3.3	114	3.3	166	1.8		
18	4.4	5	4.4	18	3.2	11	1.9	63	3.3	115	GND	167	1.9		
19	4.4	6	4.4	19	0.0	12	GND	64	3.3	116	2.2	168	1.9		
20	N/C	7	N/C	20	0.0	13	0.6	65	GND	117	0.0	169	1.9		
21	4.9	8	N/C	21	0.0	14	1.0	66	GND	118	GND	170	1.9		
22	4.3	9	N/C	22	0.0	15	1.9	67	3.3	119	N/C	171	1.3		
23	4.4	10	4.4	23	0.0	16	1.3	68	GND	120	N/C	172	2.2		
24	3.9	11	4.4	24	0.0	17	1.0	69	0.0	121	N/C	173	GND		
25	4.4	12	4.4	25	3.3	18	1.0	70	3.3	122	1.4	174	1.5		
26	4.4	13	4.4	26	GND	19	1.2	71	GND	123	1.3	175	1.6		
27	N/C	14	N/C	27	0.0	20	1.0	72	3.3	124	1.4	176	1.3		
28	4.9	15	N/C	28	0.0	21	2.2	73	3.3	125	1.4	177	1.0		
29	N/C	16	4.4	29	0.0	22	GND	74	2.2	126	1.0	178	2.3		
30	N/C	17	4.4	30	0.0	23	3.3	75	GND	127	0.9	179	0.7		
31	N/C	18	4.4	31	0.0	24	GND	76	GND	128	1.1	180	1.6		
32	GND	19	4.4	32	0.0	25	0.8	77	GND	129	0.9	181	0.8		
33	4.4	20	N/C	33	N/C	26	0.8	78	3.3	130	GND	182	2.2		
34	4.6	21	N/C	34	3.3	27	0.6	79	3.3	131	N/C	183	GND		
35	GND	22	N/C	35	1.7	28	1.2	80	GND	132	N/C	184	N/C		
36	N/C	23	4.4	36	0.5	29	0.7	81	3.3	133	1.6	185	N/C		
37	N/C	24	4.4	37	N/C	30	0.9	82	3.3	134	1.6	186	N/C		
38	4.5	25	4.4	38	3.3	31	1.0	83	GND	135	2.2	187	GND		
39	N/C	26	GND	39	1.6	32	0.9	84	GND	136	2.2	188	GND		
40	4.5	27	4.6	40	1.6	33	3.3	85	3.3	137	2.2	189	GND		
41	4.5	28	4.6	41	GND	34	GND	86	GND	138	2.1	190	GND		
42	9.0	**IC3203**		42	1.5	35	0.0	87	GND	139	2.2	191	GND		
43	4.5	**PIN**	**VOLT**	43	1.5	36	0.0	88	GND	140	1.1	192	GND		
44	4.4	1	4.4	44	3.3	37	0.0	89	GND	141	2.2	193	GND		
45	4.5	2	4.4	45	1.8	38	0.0	90	GND	142	GND	194	GND		
46	N/C	3	4.4	46	2.0	39	0.0	91	N/C	143	3.3	195	GND		
47	4.4	4	GND	47	GND	40	0.0	92	N/C	144	GND	196	GND		
48	N/C	5	4.4	48	1.7	41	0.0	93	GND	145	N/C	197	2.2		
49	4.1	6	4.4	49	1.2	42	0.0	94	2.2	146	N/C	198	GND		
50	4.5	7	4.4	50	GND	43	2.2	95	1.0	147	1.6	199	GND		
51	4.4	8	9.0												

All voltages are in V.

B BOARD IC VOLTAGE LIST (3 OF 5)

IC3304		51	4.8	N/C	0.0	50	1.0	7	GND
PIN	**VOLT**	52	4.4	**IC3402**		51	1.6	8	N/C
1	1.6	53	2.4	**PIN**	**VOLT**	52	GND	9	0.0
2	GND	54	2.4	1	3.3	53	0.9	10	GND
3	GND	55	1.6	2	1.8	54	0.9	11	GND
4	GND	56	0.5	3	3.3	55	3.3	12	0.9
5	GND	57	GND	4	1.3	56	1.1	13	3.6
6	1.2	58	3.3	5	0.9	57	N/C	14	4.8
7	1.2	59	3.3	6	GND	58	GND	**IC3405**	
8	0.0	60	1.6	7	2.4	59	2.4	**PIN**	**VOLT**
9	1.9	61	3.2	8	2.2	60	0.0	1	4.8
10	0.1	62	4.8	9	3.3	61	2.4	2	0.3
11	0.8	63	2.1	10	0.9	62	2.2	3	GND
12	2.0	64	GND	11	2.8	63	1.7	4	0.3
13	1.6	**IC3305**		12	GND	64	1.7	5	4.8
14	3.3	**PIN**	**VOLT**	13	0.9	65	1.8	**IC3406**	
15	0.0	1	3.4	14	N/C	66	0.1	**PIN**	**VOLT**
16	3.3	2	GND	15	3.3	67	2.9	1	4.8
17	0.0	3	1.6	16	0.1	68	1.8	2	0.0
18	3.2	4	0.2	17	3.1	69	N/C	3	GND
19	3.2	5	1.3	18	2.9	70	N/C	4	0.0
20	3.2	6	1.4	19	3.3	71	0.1	5	4.8
21	3.2	7	GND	20	2.8	72	GND	**IC3407**	
22	3.2	8	N/C	21	N/C	73	N/C	**PIN**	**VOLT**
23	2.0	9	GND	22	1.7	74	1.8	1	4.8
24	1.1	10	GND	23	1.7	75	3.3	2	1.0
25	GND	11	GND	24	0.1	76	1.3	3	GND
26	4.8	12	1.4	25	0.1	77	0.7	4	2.4
27	2.4	13	2.2	26	2.3	78	GND	5	4.8
28	2.4	14	3.4	27	0.1	79	2.5		
29	3.2	**IC3306**		28	2.4	80	0.7		
30	4.8	**PIN**	**VOLT**	29	3.3	81	3.3		
31	2.4	1	4.8	30	N/C	82	1.0		
32	GND	2	GND	31	1.7	83	2.8		
33	1.5	3	1.9	32	GND	84	GND		
34	GND	4	3.3	33	1.6	85	1.1		
35	3.3	5	1.6	34	1.3	86	GND		
36	N/C	6	2.2	35	3.3	**IC3403**			
37	N/C	7	GND	36	1.6	**PIN**	**VOLT**		
38	GND	8	N/C	37	1.7	1	N/C		
39	GND	9	GND	38	GND	2	GND		
40	GND	10	GND	39	0.9	3	GND		
41	GND	11	GND	40	1.7	4	1.7		
42	GND	12	2.3	41	3.3	5	2.5		
43	GND	13	2.1	42	1.1	**IC3404**			
44	GND	14	4.2	43	3.3	**PIN**	**VOLT**		
45	4.9	**IC3401**		44	GND	1	4.8		
46	GND	**PIN**	**VOLT**	45	1.7	2	GND		
47	GND	I	3.3	46	GND	3	2.3		
48	1.5	G	GND	47	1.7	4	0.3		
49	GND	O	2.5	48	1.4	5	2.4		
50	0.0	VC	3.3	49	3.3	6	0.9		

All voltages are in V.

B BOARD IC VOLTAGE LIST (4 OF 5)

IC3408		53	1.4	107	3.3	161	0.7	215	1.0	20	0.8	4	0.1
PIN	**VOLT**	54	3.3	108	1.7	162	2.5	216	GND	21	GND	5	0.3
1	GND	55	GND	109	1.7	163	GND	217	GND	22	GND	6	GND
2	GND	56	1.6	110	1.1	164	2.5	218	GND	23	1.4	7	GND
3	N/C	57	1.6	111	1.7	165	0.7	219	GND	24	1.5	8	GND
4	N/C	58	1.5	112	0.9	166	1.3	220	GND	25	1.5	9	5.0
5	N/C	59	1.5	113	1.7	167	1.8	221	1.2	26	1.5	10	5.0
6	3.3	60	1.5	114	3.3	168	0.9	222	GND	27	1.5	11	5.0
7	GND	61	1.4	115	GND	169	1.1	223	GND	28	1.5	12	0.0
8	GND	62	2.4	116	1.6	170	1.1	224	GND	29	1.5	13	0.0
9	0.0	63	0.9	117	1.3	171	GND	225	GND	30	1.9	14	0.0
10	0.2	64	0.8	118	1.6	172	GND	226	GND	31	1.6	15	0.0
11	0.0	65	0.9	119	1.7	173	GND	227	GND	32	1.7	16	4.9
12	0.0	66	3.3	120	0.0	174	3.3	228	GND	33	1.6	**IC3414**	
13	0.0	67	GND	121	2.4	175	GND	229	GND	34	GND	**PIN**	**VOLT**
14	0.0	68	0.8	122	2.2	176	GND	230	GND	35	1.0	1	4.6
15	0.0	69	0.6	123	1.7	177	GND	231	GND	36	0.0	2	5.0
16	2.3	70	0.9	124	1.7	178	GND	232	GND	37	2.0	3	3.1
17	1.6	71	0.9	125	1.8	179	GND	233	GND	38	2.6	4	GND
18	3.3	72	3.2	126	3.3	180	GND	234	GND	39	4.8	5	3.1
19	GND	73	3.2	127	GND	181	GND	235	GND	40	4.8	6	3.1
20	0.6	74	0.9	128	0.1	182	GND	236	GND	41	4.8	7	5.0
21	1.1	75	GND	129	0.1	183	GND	237	GND	42	1.0	8	4.6
22	2.2	76	3.3	130	2.3	184	GND	238	GND	43	0.0	9	4.6
23	2.2	77	2.5	131	0.1	185	GND	239	GND	44	0.5	10	GND
24	2.4	78	GND	132	0.1	186	GND	240	GND	45	0.0	11	4.6
25	2.4	79	1.7	133	1.7	187	GND	**IC3409**		46	0.0	12	5.0
26	2.3	80	3.3	134	1.7	188	GND	**PIN**	**VOLT**	47	0.0	13	8.9
27	2.2	81	N/C	135	2.8	189	GND	I	3.3	48	4.8	14	4.6
28	1.6	82	2.5	136	GND	190	GND	G	3.3	**IC3411**		15	GND
29	0.9	83	2.3	137	1.6	191	GND	O	2.5	**PIN**	**VOLT**	16	4.6
30	GND	84	0.4	138	3.3	192	GND	VC	3.3	1	3.2		
31	1.1	85	0.0	139	GND	193	3.3	NC	0.0	2	N/C		
32	1.0	86	0.0	140	1.5	194	2.4	**IC3410**		3	3.2		
33	1.5	87	2.3	141	0.0	195	2.4	**PIN**	**VOLT**	4	GND		
34	1.4	88	1.6	142	2.6	196	0.0	1	GND	5	0.1		
35	1.4	89	2.5	143	3.0	197	2.4	2	GND	6	3.3		
36	2.4	90	GND	144	3.1	198	GND	3	0.9	7	0.0		
37	1.8	91	1.2	145	2.5	199	1.0	4	0.9	8	3.3		
38	GND	92	3.3	146	0.0	200	N/C	5	0.6	**IC3412**			
39	1.4	93	3.0	147	0.0	201	0.0	6	0.8	**PIN**	**VOLT**		
40	1.4	94	3.0	148	0.9	202	1.0	7	0.9	1	0.3		
41	1.5	95	GND	149	2.8	203	GND	8	0.8	2	5.0		
42	2.4	96	3.3	150	GND	204	GND	9	0.9	3	N/C		
43	GND	97	GND	151	0.9	205	N/C	10	2.4	4	GND		
44	0.8	98	3.3	152	2.2	206	2.4	11	GND	5	GND		
45	1.0	99	1.1	153	2.4	207	GND	12	GND	6	GND		
46	0.7	100	0.9	154	0.7	208	1.0	13	1.2	7	0.3		
47	2.4	101	2.5	155	1.3	209	2.4	14	1.1	8	5.0		
48	0.9	102	GND	156	2.5	210	1.0	15	1.0	**IC3413**			
49	1.0	103	0.9	157	1.8	211	GND	16	0.9	**PIN**	**VOLT**		
50	1.1	104	1.6	158	1.1	212	2.0	17	2.4	1	0.0		
51	1.2	105	1.0	159	2.8	213	4.5	18	0.7	2	0.5		
52	1.9	106	1.4	160	1.6	214	2.4	19	1.0	3	0.1		

All voltages are in V.

B BOARD IC VOLTAGE LIST (5 OF 5)

IC3601

PIN	VOLT
1	N/C
2	N/C
3	N/C
4	N/C
5	N/C
6	N/C
7	0.2
8	0.1
9	4.9
10	GND
11	2.4
12	2.1
13	GND
14	GND
15	GND
16	4.9
17	4.9
18	GND
19	GND
20	1.6
21	2.4
22	1.5
23	4.9
24	0.0
25	N/C
26	N/C
27	N/C
28	N/C
29	N/C
30	N/C
31	0.0
32	0.0
33	0.0
34	0.0
35	N/C
36	0.0
37	N/C
38	2.4
39	2.4
40	4.9
41	4.9
42	GND
43	GND
44	N/C
45	N/C
46	N/C
47	N/C
48	4.6
49	N/C
50	4.6
51	N/C
52	N/C
53	N/C
54	N/C
55	N/C
56	N/C
57	N/C
58	N/C
59	N/C
60	N/C
61	N/C
62	N/C
63	N/C
64	N/C

IC3602

PIN	VOLT
1	N/C
2	N/C
3	N/C
4	N/C
5	N/C
6	N/C
7	0.2
8	0.1
9	4.9
10	GND
11	2.4
12	2.2
13	GND
14	GND
15	GND
16	4.9
17	GND
18	GND
19	GND
20	1.7
21	2.5
22	2.5
23	4.9
24	2.4
25	N/C
26	N/C
27	N/C
28	N/C
29	N/C
30	N/C
31	0.0
32	0.0
33	0.0
34	0.0
35	N/C
36	0.0
37	N/C
38	2.4
39	2.4
40	4.9
41	4.9
42	GND
43	GND
44	N/C
45	N/C
46	N/C
47	N/C
48	4.6
49	N/C
50	4.6
51	N/C
52	N/C
53	N/C
54	N/C
55	GND
56	GND
57	GND
58	GND
59	GND
60	GND
61	N/C
62	N/C
63	N/C
64	N/C

IC3603

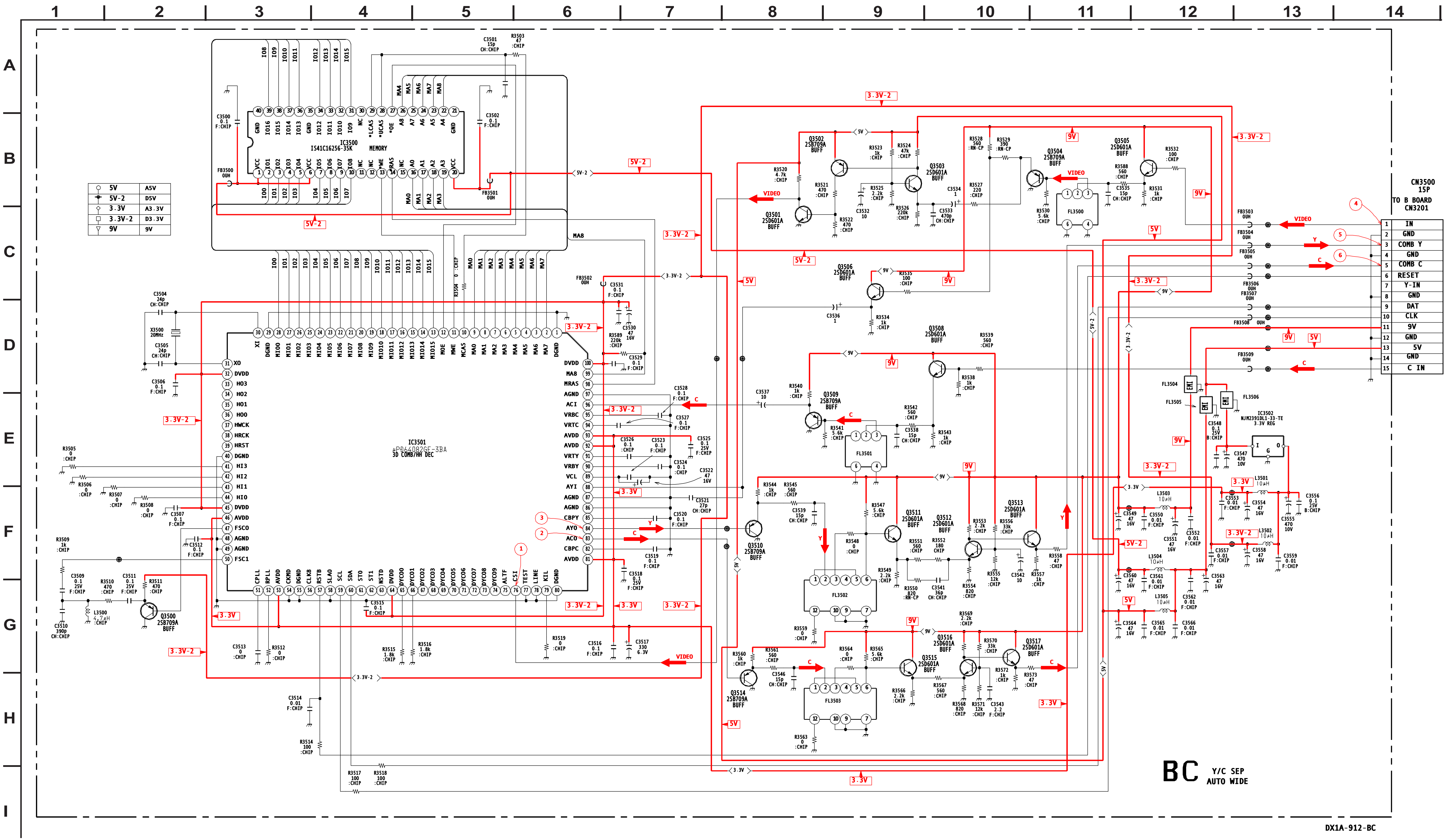
PIN	VOLT
1	4.9
2	GND
3	4.9
4	1.4
5	4.9
6	1.9
7	1.6
8	GND
9	4.6
10	4.6
11	4.9
12	2.6
13	2.4
14	GND
15	4.6
16	4.6

IC3604

PIN	VOLT
1	0.1
2	0.1
3	2.5
4	GND
5	2.5
6	0.0
7	0.1
8	5.0

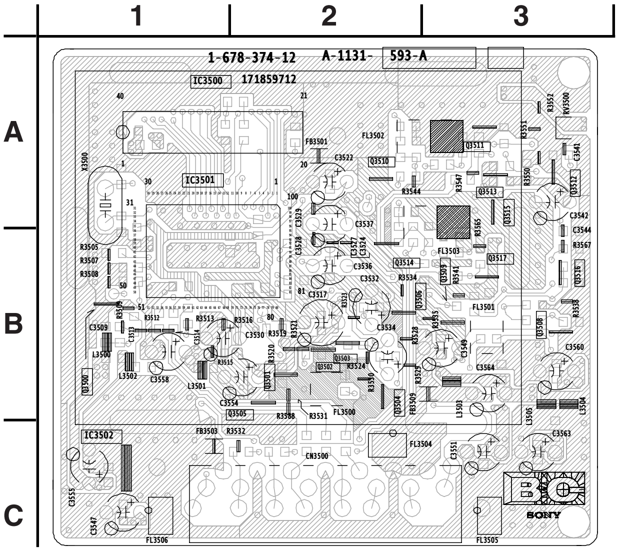
All voltages are in V.

BC BOARD SCHEMATIC DIAGRAM

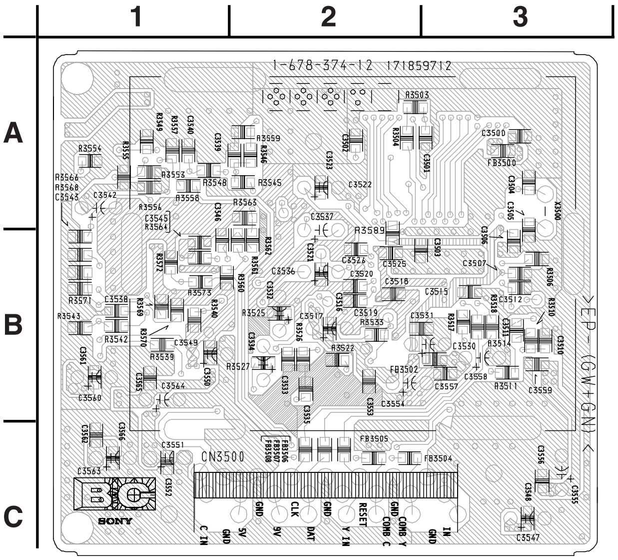


BC [Y/C SEP, AUTO WIDE]

COMPONENT SIDE



CONDUCTOR SIDE



BC BOARD LOCATOR LIST

IC			
		Q3506	B-3
IC3500	A-1	Q3508	B-3
IC3501	A-1	Q3509	B-3
IC3502	C-1	Q3510	A-2
TRANSISTOR		Q3511	A-3
Q3500	B-1	Q3512	A-3
Q3501	B-2	Q3513	A-3
Q3502	B-2	Q3514	B-2
Q3503	B-2	Q3515	A-3
Q3504	B-2	Q3516	B-3
Q3505	C-2	Q3517	B-3

BC BOARD TRANSISTOR VOLTAGE LIST

	B	C	E		B	C	E
Q3500	1.7	GND	2.3	Q3510	1.7	GND	2.3
Q3501	0.1	4.2	GND	Q3511	2.9	8.9	2.3
Q3502	4.6	0.4	4.9	Q3512	2.3	6.1	1.7
Q3503	3.3	4.7	4.0	Q3513	6.1	8.9	5.5
Q3504	3.3	GND	4.0	Q3514	1.6	GND	2.3
Q3505	4.3	8.9	3.6	Q3515	2.9	8.9	2.3
Q3506	6.0	8.9	5.3	Q3516	2.3	6.4	1.7
Q3508	2.4	8.9	1.8	Q3517	6.4	8.9	5.7
Q3509	1.6	GND	2.3				

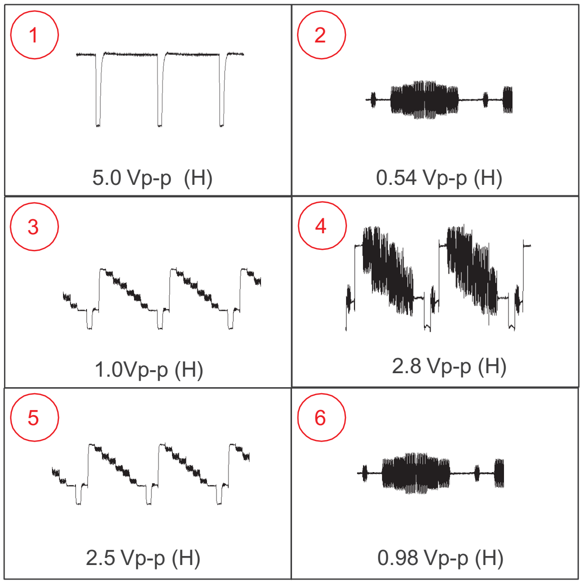
All voltages are in V.

BC BOARD IC VOLTAGE LIST

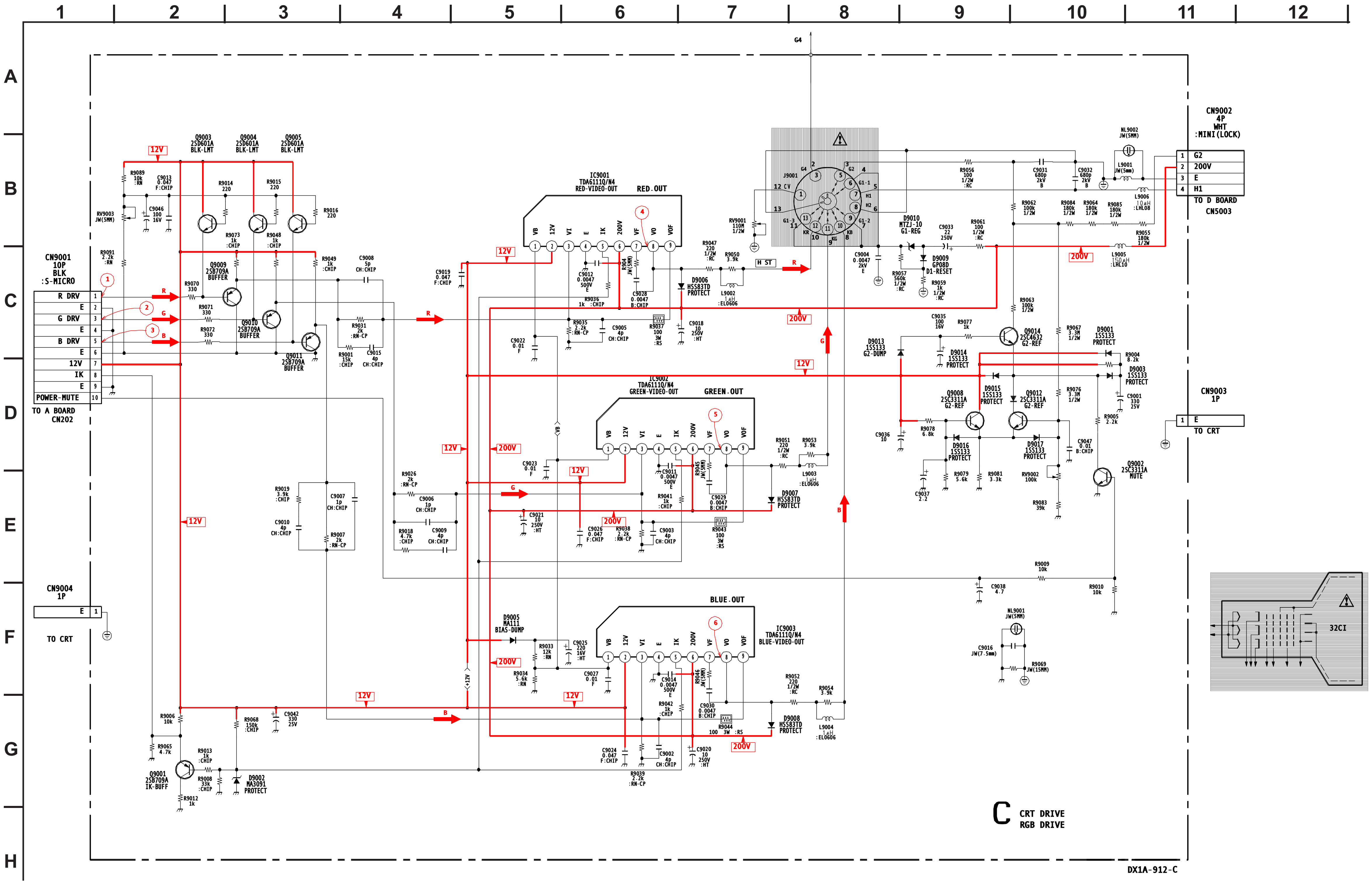
IC3500		18	1.5	37	1.8	14	2.5	33	N/C	52	0.0	71	N/C	90	0.9
PIN	**VOLT**	19	1.5	38	1.8	15	1.3	34	N/C	53	3.2	72	N/C	91	1.6
1	4.8	20	4.8	39	1.8	16	1.7	35	N/C	54	GND	73	N/C	92	3.2
2	2.0	21	N/C	40	N/C	17	1.9	36	N/C	55	GND	74	N/C	93	3.2
3	2.0	22	1.5	**IC3501**		18	1.8	37	N/C	56	N/C	75	N/C	94	3.2
4	1.8	23	1.5	**PIN**	**VOLT**	19	1.9	38	N/C	57	5.0	76	4.1	95	2.0
5	1.9	24	1.5	1	GND	20	1.8	39	N/C	58	GND	77	GND	96	2.6
6	4.8	25	1.5	2	1.5	21	0.9	40	GND	59	4.5	78	GND	97	GND
7	1.6	26	1.5	3	1.5	22	1.3	41	0.0	60	4.5	79	0.0	98	0.5
8	1.4	27	2.4	4	1.5	23	1.4	42	0.0	61	N/C	80	GND	99	1.5
9	1.1	28	1.0	5	1.5	24	1.6	43	0.0	62	N/C	81	3.2	100	3.2
10	0.8	29	1.0	6	1.5	25	1.8	44	0.0	63	N/C	82	1.0	**IC3502**	
11	N/C	30	N/C	7	1.5	26	1.8	45	3.2	64	3.2	83	1.6	**PIN**	**VOLT**
12	N/C	31	1.9	8	1.5	27	2.0	46	3.2	65	0.0	84	1.7	I	4.8
13	2.9	32	2.5	9	1.5	28	2.0	47	1.7	66	0.0	85	1.0	G	GND
14	0.5	33	1.3	10	1.0	29	GND	48	GND	67	N/C	86	GND	O	3.3
15	N/C	34	1.7	11	2.8	30	1.4	49	GND	68	N/C	87	GND		
16	1.5	35	N/C	12	2.4	31	1.5	50	1.4	69	N/C	88	1.3		
17	1.5	36	1.9	13	1.9	32	3.2	51	0.0	70	N/C	89	0.5		

All voltages are in V.

BC BOARD WAVEFORMS



C BOARD SCHEMATIC DIAGRAM



C BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q9001	7.5	0.0	3.6
Q9002	0.2	11.1	GND
Q9003	2.1	12.0	3.2
Q9004	2.1	12.0	3.2
Q9005	3.2	12.0	2.1
Q9008	5.4	12.0	4.8
Q9009	3.2	GND	3.9
Q9010	3.2	GND	4.0
Q9011	3.2	GND	3.9
Q9012	5.4	10.5	4.8
Q9014	11.7	450.0	11.1

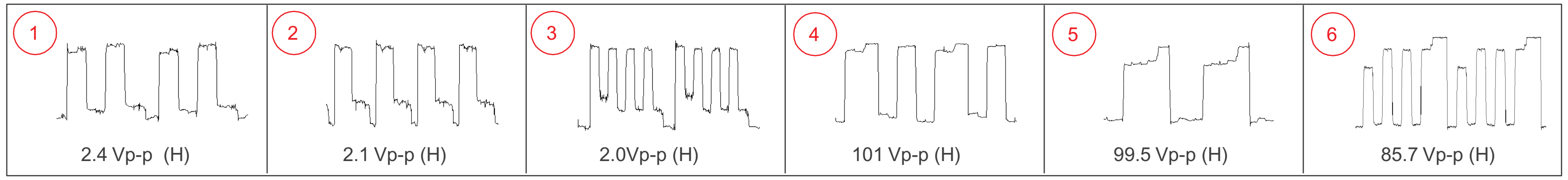
All voltages are in V.

C BOARD IC VOLTAGE LIST

IC9001		IC9002		IC9003	
PIN	VOLT	PIN	VOLT	PIN	VOLT
1	3.5	1	3.5	1	3.5
2	12.0	2	12.0	2	12.0
3	3.5	3	3.5	3	3.5
4	GND	4	GND	4	GND
5	8.0	5	7.8	5	7.8
6	203.0	6	203.0	6	203.0
7	145.0	7	142.6	7	147.0
8	158.0	8	164.0	8	163.0
9	144.0	9	142.0	9	146.0

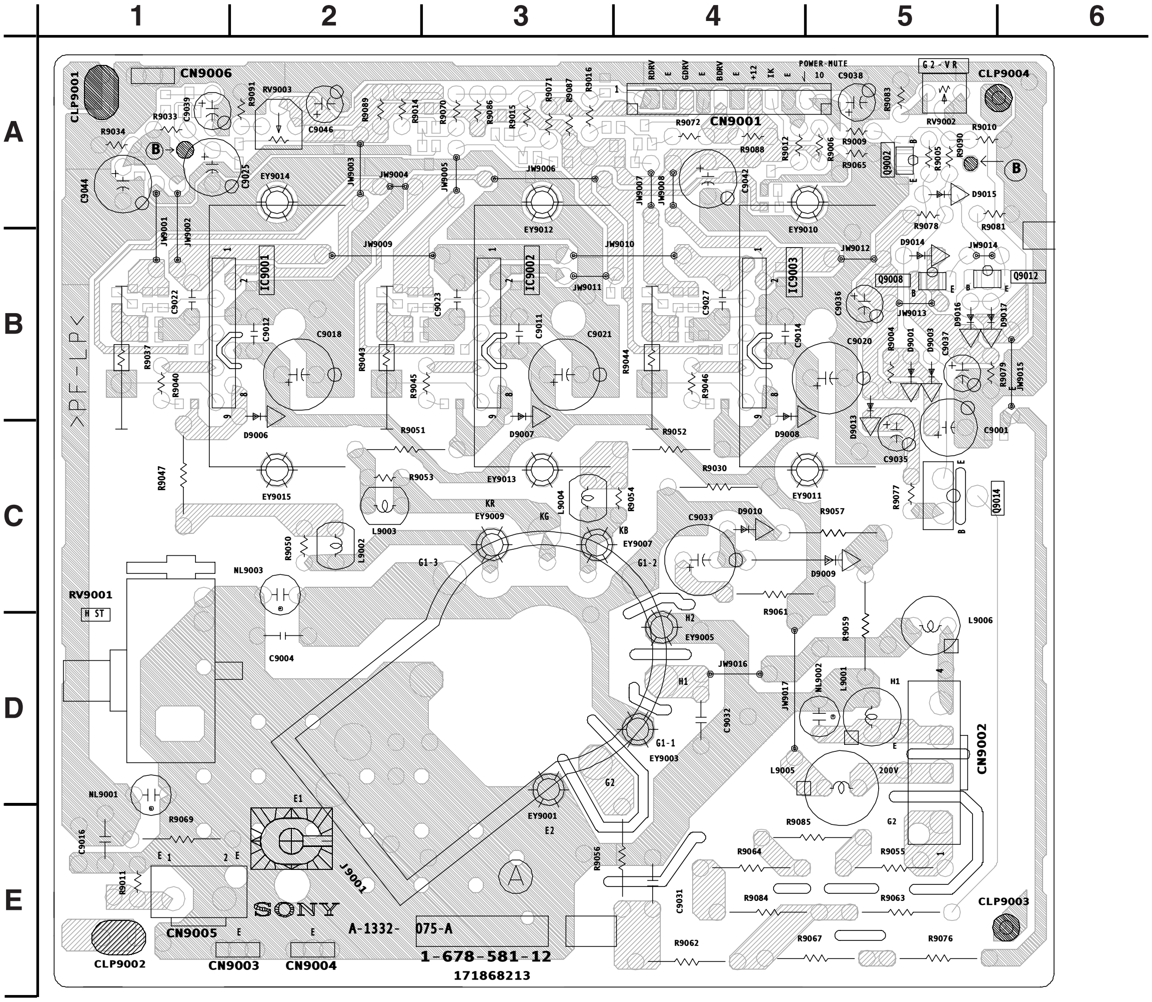
All voltages are in V.

C BOARD WAVEFORMS



C [CRT DRIVE, RGB DRIVE]

COMPONENT SIDE

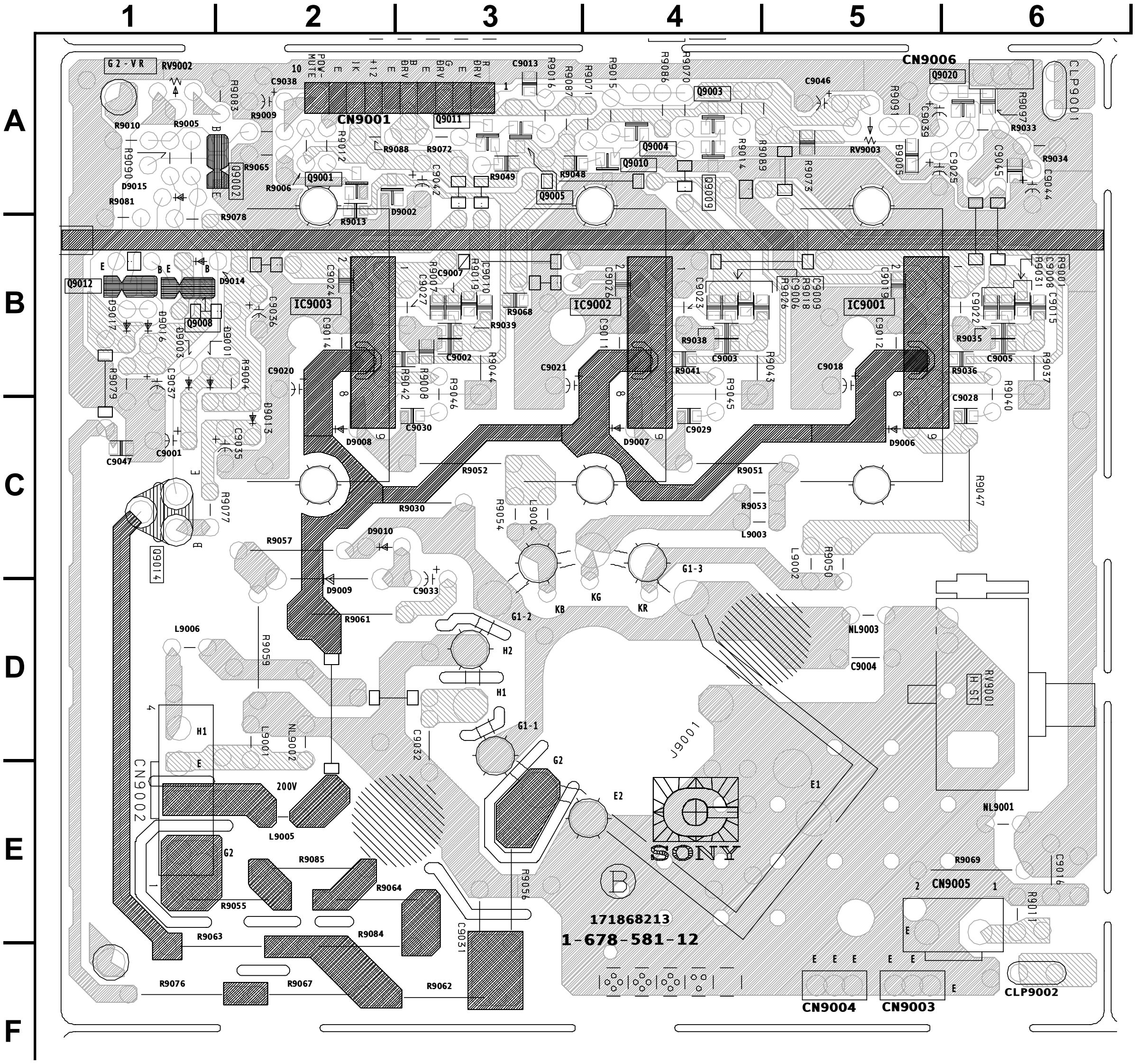


C BOARD LOCATOR LIST (COMPONENT SIDE)

DIODE		D9016	B-6
D9001	B-6	D9017	B-6
D9003	B-6	**IC**	
D9007	C-3	IC9001	B-2
D9008	C-5	IC9002	B-3
D9009	D-5	IC9003	B-5
D9010	C-5	**TRANSISTOR**	
D9013	C-5	Q9002	A-5
D9014	B-6	Q9014	C-6
D9015	A-6		

C [CRT DRIVE, RGB DRIVE]

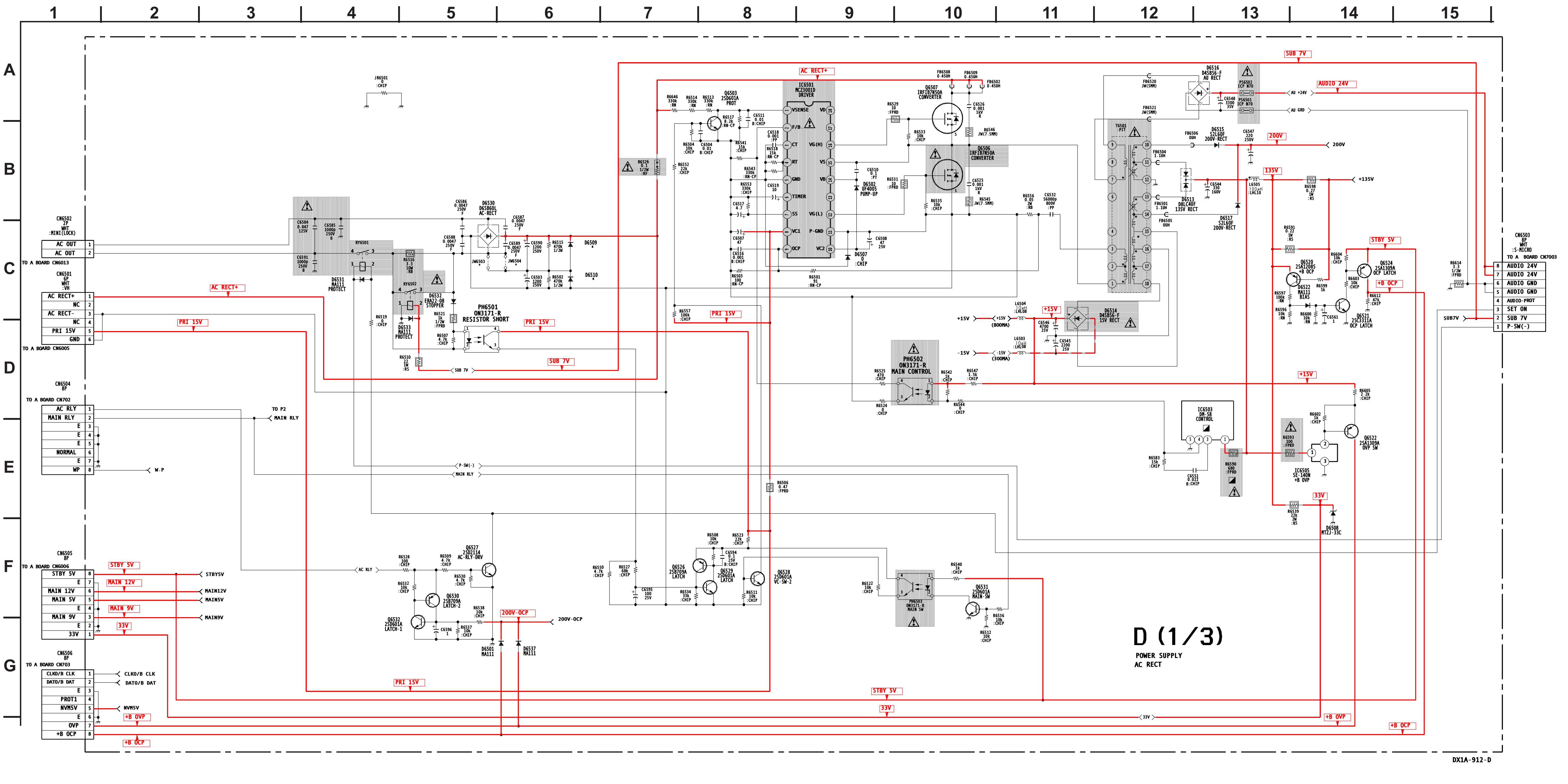
CONDUCTOR SIDE



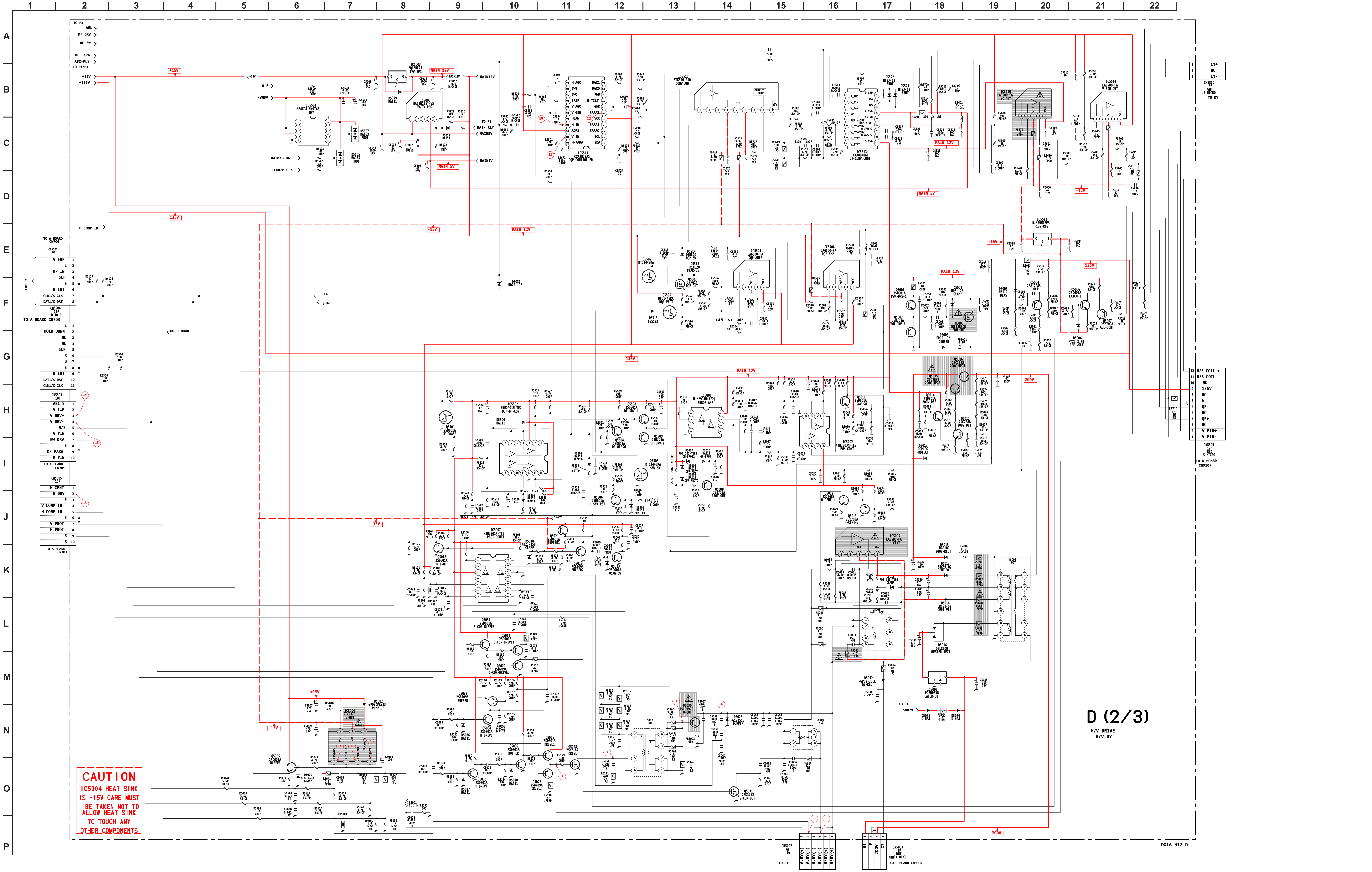
C BOARD LOCATOR LIST (CONDUCTOR SIDE)

DIODE		Q9004	A-4
D9002	A-2	Q9005	A-3
D9005	A-5	Q9008	B-1
D9006	C-5	Q9009	A-4
TRANSISTOR		Q9010	A-4
Q9001	A-2	Q9011	A-3
Q9003	A-4	Q9012	B-1

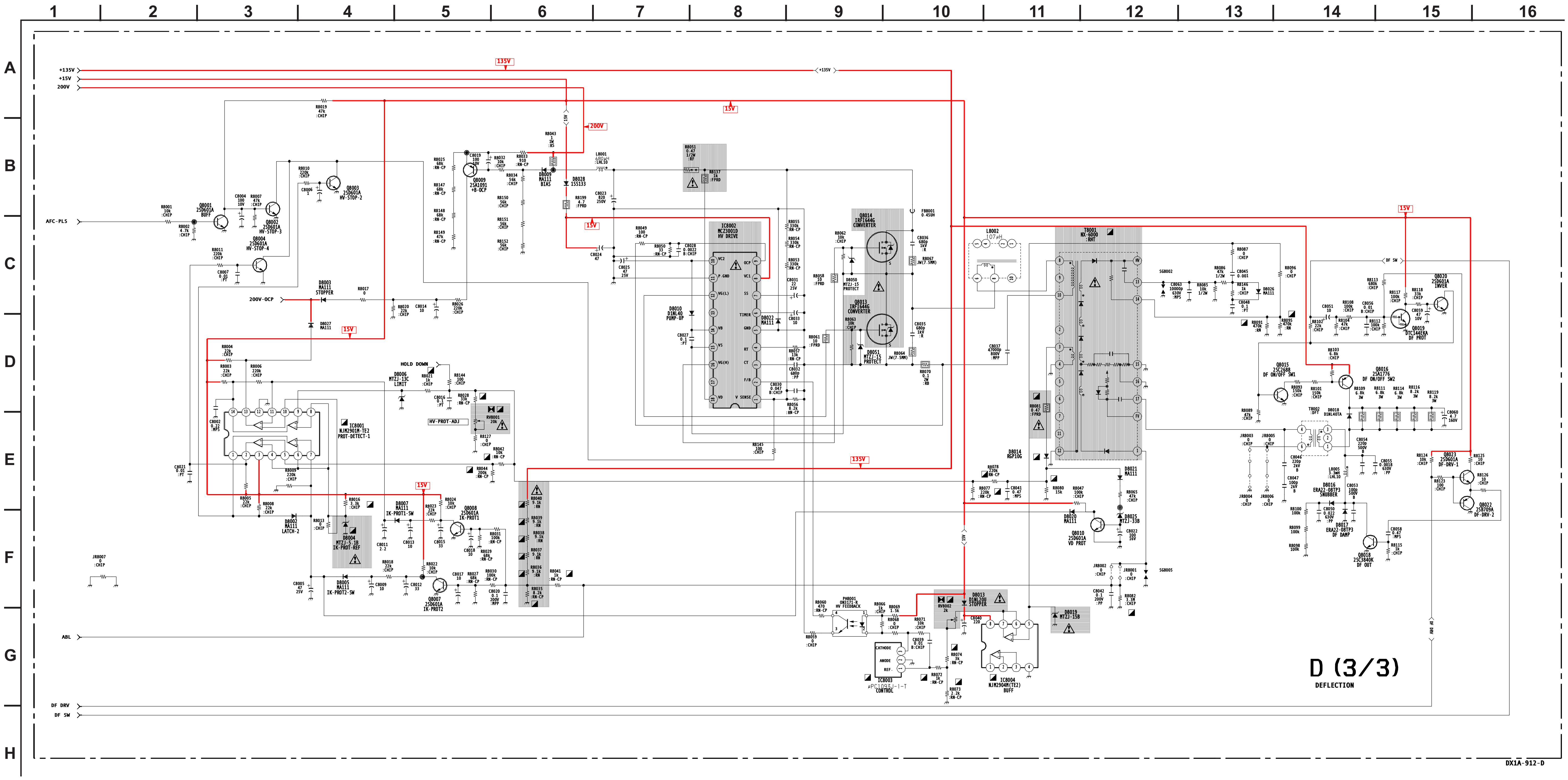
D BOARD SCHEMATIC DIAGRAM (1 OF 3)



D BOARD SCHEMATIC DIAGRAM (2 OF 3)

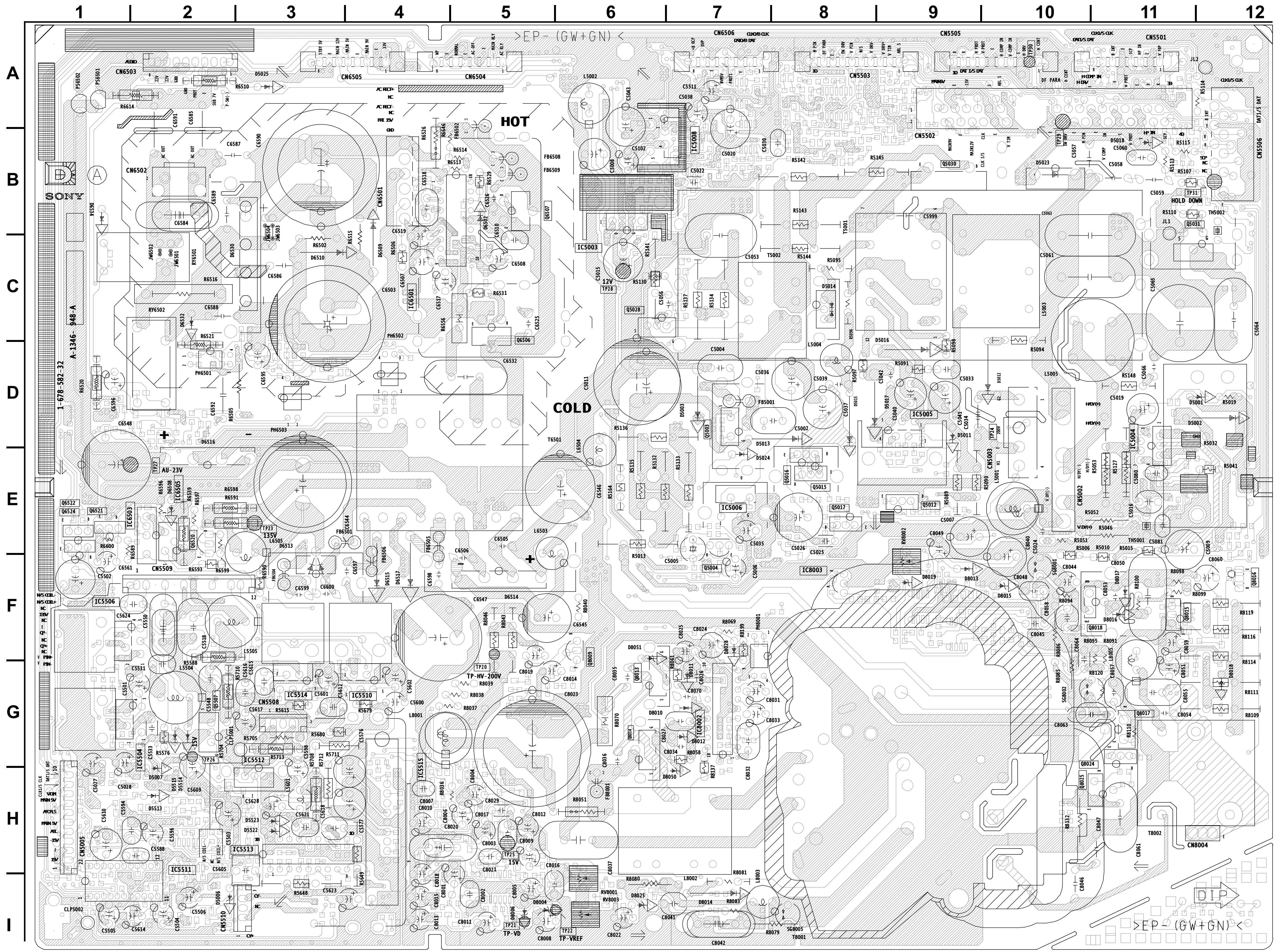


D BOARD SCHEMATIC DIAGRAM (3 OF 3)



D [POWER SUPPLY, AC RECT, H/V DRIVE, H/V DY, DEFLECTION]

COMPONENT SIDE

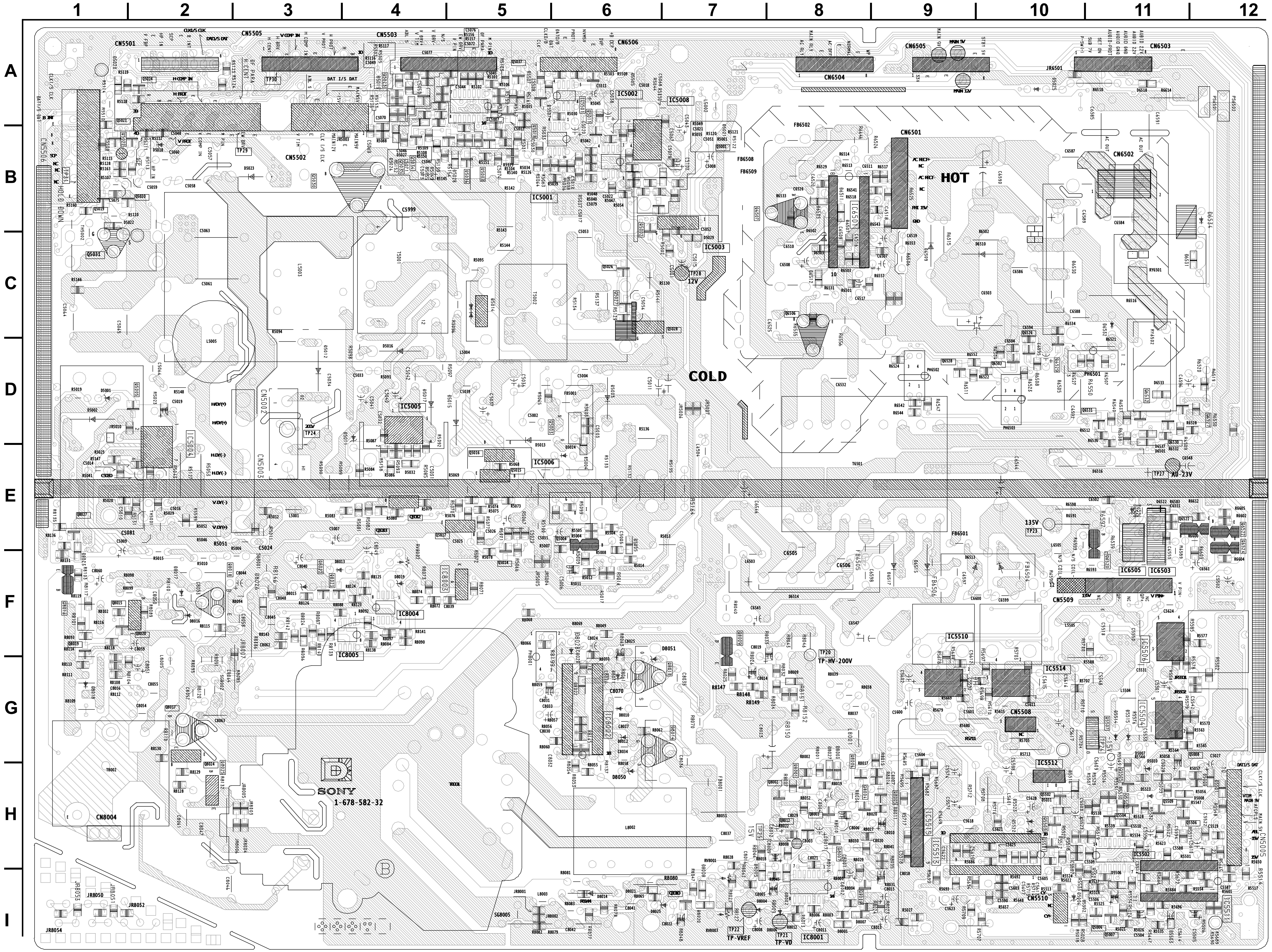


D BOARD LOCATOR LIST (COMPONENT SIDE)

DIODE		D8028	F-7
D5001	D-12	D8050	H-6
D5002	D-12	D8051	F-6
D5003	D-7	IC	
D5006	I-2	IC5004	D-11
D5007	H-2	IC5005	D-9
D5011	D-9	IC5006	E-7
D5012	D-10	IC5504	H-2
D5013	D-7	IC5506	F-1
D5014	C-8	IC5510	G-4
D5015	D-8	IC5511	I-2
D5016	C-9	IC5512	H-3
D5017	D-9	IC5513	H-3
D5018	B-11	IC5514	G-3
D5023	B-10	IC5515	H-4
D5024	E-7	IC6501	C-4
D5025	A-3	IC6503	E-2
D5513	H-2	IC6505	E-2
D5514	H-2	IC8002	G-7
D5515	H-2	IC8003	F-8
D5522	H-3	TRANSISTOR	
D5523	H-3	Q5003	D-7
D6502	C-5	Q5004	F-7
D6508	E-2	Q5030	B-9
D6509	C-4	Q5031	B-11
D6510	C-3	Q5507	G-2
D6513	F-3	Q6507	B-5
D6514	G-6	Q6521	E-1
D6515	F-4	Q6522	E-1
D6516	D-2	Q6524	E-1
D6517	F-4	Q8009	G-6
D6532	C-2	Q8013	G-6
D8004	I-5	Q8014	G-6
D8006	I-5	Q8015	F-11
D8017	F-11	Q8018	F-11
D8018	G-12		
D8019	F-9		
D8025	I-6		

D [POWER SUPPLY, AC RECT, H/V DRIVE, H/V DY, DEFLECTION]

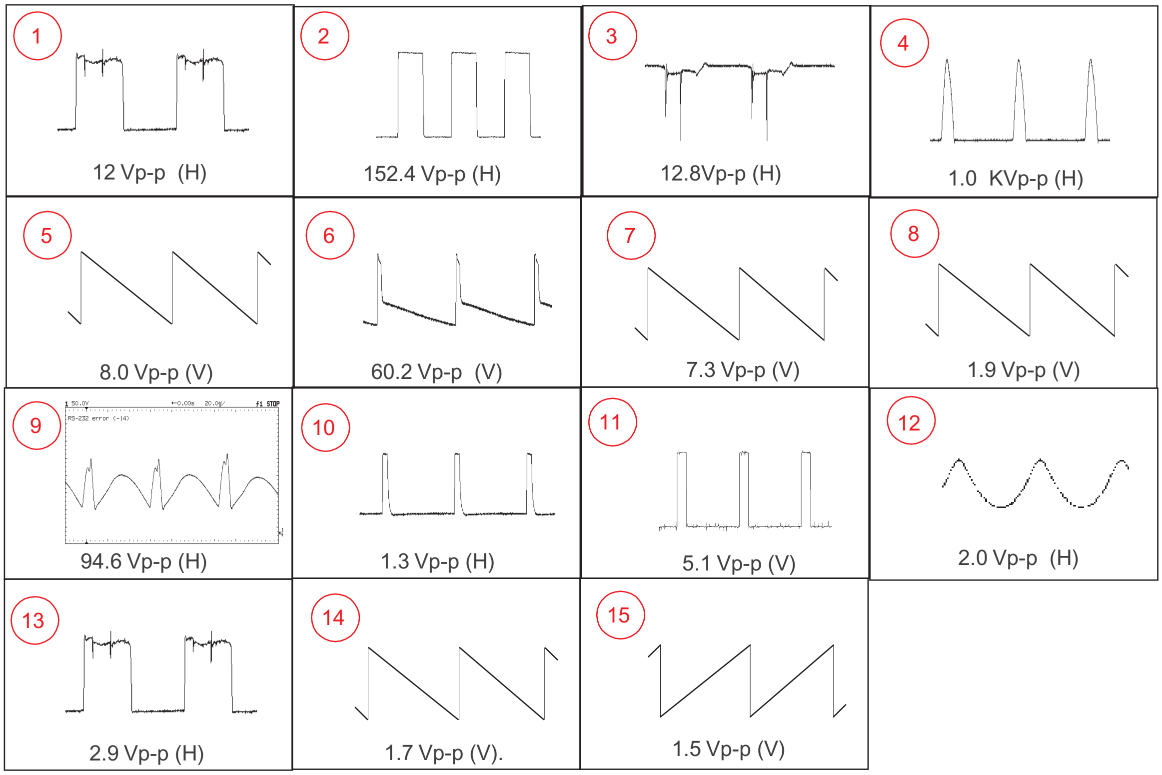
CONDUCTOR SIDE



D BOARD LOCATOR LIST (CONDUCTOR SIDE)

DIODE		D8021	I-6	Q5033	B-4
D5004	E-6	D8022	G-6	Q5034	B-4
D5005	F-6	D8026	G-5	Q5035	B-4
D5008	H-12	D8027	G-8	Q5036	B-5
D5009	H-12	**IC**		Q5037	A-5
D5010	H-11	IC5001	B-5	Q5501	H-10
D5019	B-3	IC5002	A-6	Q5502	H-10
D5021	B-6	IC5003	C-7	Q5503	H-10
D5026	B-4	IC5007	A-5	Q5504	H-11
D5027	B-4	IC5008	A-7	Q5505	H-11
D5028	B-4	IC5501	A-6	Q5506	H-12
D5029	C-7	IC5502	H-11	Q5508	H-11
D5031	H-10	IC8001	I-8	Q5509	H-11
D5032	E-4	IC8004	F-4	Q6503	D-10
D5501	I-12	**TRANSISTOR**		Q6506	D-7
D5502	I-11	Q5001	B-7	Q6520	F-11
D5503	I-12	Q5002	B-7	Q6526	C-10
D5505	A-6	Q5005	D-2	Q6527	D-11
D5506	H-11	Q5006	I-11	Q6528	D-9
D5507	B-5	Q5007	I-11	Q6529	D-11
D6501	D-11	Q5008	G-12	Q6530	D-11
D6507	B-8	Q5011	A-6	Q6531	D-10
D6522	E-11	Q5012	E-4	Q6532	D-11
D6530	C-10	Q5013	E-4	Q8001	H-8
D6531	C-11	Q5014	E-4	Q8002	H-8
D6533	D-11	Q5015	E-5	Q8003	H-8
D6537	E-11	Q5016	E-5	Q8004	H-8
D8002	I-8	Q5017	E-4	Q8007	H-8
D8003	I-8	Q5018	B-5	Q8008	I-8
D8005	I-8	Q5019	B-1	Q8010	I-7
D8007	I-8	Q5020	B-2	Q8016	F-1
D8009	G-7	Q5021	B-2	Q8019	F-1
D8010	G-6	Q5022	B-2	Q8020	F-2
D8013	F-4	Q5023	A-4	Q8022	F-4
D8014	I-6	Q5026	C-6	Q8023	F-4
D8016	F-2	Q5027	C-6		
D8020	I-7	Q5028	C-7		

D BOARD WAVEFORMS



D BOARD TRANSISTOR VOLTAGE LIST

	B	C	E		B	C	E		B	C	E
Q5001	2.9	12.0	3.3	Q5027	5.2	0.0	5.2	Q6528	0.6	0.0	0.0
Q5002	2.9	GND	3.3	Q5030	132.0	0.0	GND	Q6529	0.0	5.9	0.0
Q5003	127.4	134.1	23.3	Q5033	10.0	1.4	10.5	Q6530	4.7	0.0	4.7
Q5004	132.0	0.0	133.0	Q5034	0.0	1.4	GND	Q6531	0.6	0.0	GND
Q5005	-0.5	15.6	0.1	Q5035	0.0	2.5	GND	Q6532	0.0	4.7	GND
Q5006	-12.0	1.0	-12.6	Q5036	0.1	5.2	GND	Q8001	0.1	0.0	GND
Q5007	4.4	-12.6	4.8	Q5037	3.1	12.1	3.7	Q8002	0.0	1.6	GND
Q5008	11.9	0.0	10.7	Q5501	2.4	12.1	GND	Q8003	0.2	1.6	GND
Q5011	0.1	3.9	GND	Q5502	0.5	5.4	GND	Q8004	0.0	1.6	GND
Q5012	3.7	97.7	3.2	Q5503	0.5	2.4	GND	Q8007	0.6	0.0	GND
Q5013	3.1	GND	3.7	Q5504	0.0	4.0	GND	Q8008	0.6	0.0	GND
Q5014	6.6	12.1	6.1	Q5505	0.0	4.2	GND	Q8009	196.0	0.0	196.0
Q5015	202.8	212.4	203.2	Q5506	0.3	3.6	GND	Q8010	2.1	0.0	GND
Q5016	203.2	212.4	202.6	Q5508	4.0	12.1	4.6	Q8015	0.5	0.0	GND
Q5017	6.5	164.8	6.1	Q5509	4.0	GND	4.6	Q8016	134.5	134.7	135.1
Q5018	0.6	1.9	GND	Q6503	0.0	2.5	0.0	Q8018	-5.5	94.4	GND
Q5019	3.7	12.1	2.9	Q6520	131.0	0.0	132.0	Q8019	3.5	0.0	GND
Q5020	3.7	GND	2.9	Q6521	0.0	2.1	GND	Q8020	0.0	0.5	GND
Q5021	0.4	9.0	0.5	Q6522	15.7	0.0	15.7	Q8022	4.6	GND	4.9
Q5022	0.4	GND	1.1	Q6524	2.1	0.4	4.9	Q8023	4.6	15.5	4.9
Q5023	0.4	3.9	GND	Q6526	5.9	0.0	5.9				
Q5026	5.2	12.1	5.2	Q6527	0.6	0.0	0.0				

All voltages are in V.

	D	G	S		D	G	S
Q5028	5.2	33.5	GND	Q6507	154.4	303.3	150.0
Q5031	2.9	12.6	GND	Q8013	4.6	94.8	0.0
Q5507	5.4	6.9	GND	Q8014	99.0	198.0	93.2
Q6506	4.7	149.2	0.0				

All voltages are in V.

(*) D BOARD VARIANT MODEL LIST

REF. NO.	LOCATION	KV-38DRC2	KV-38DRC2C
D6509	**C-6**	ERC04-06SE	**#**
D6510	C-6	ERC04-06SE	#
JW6503	C-5	7.5MM	#
JW6504	C-6	7.5MM	#

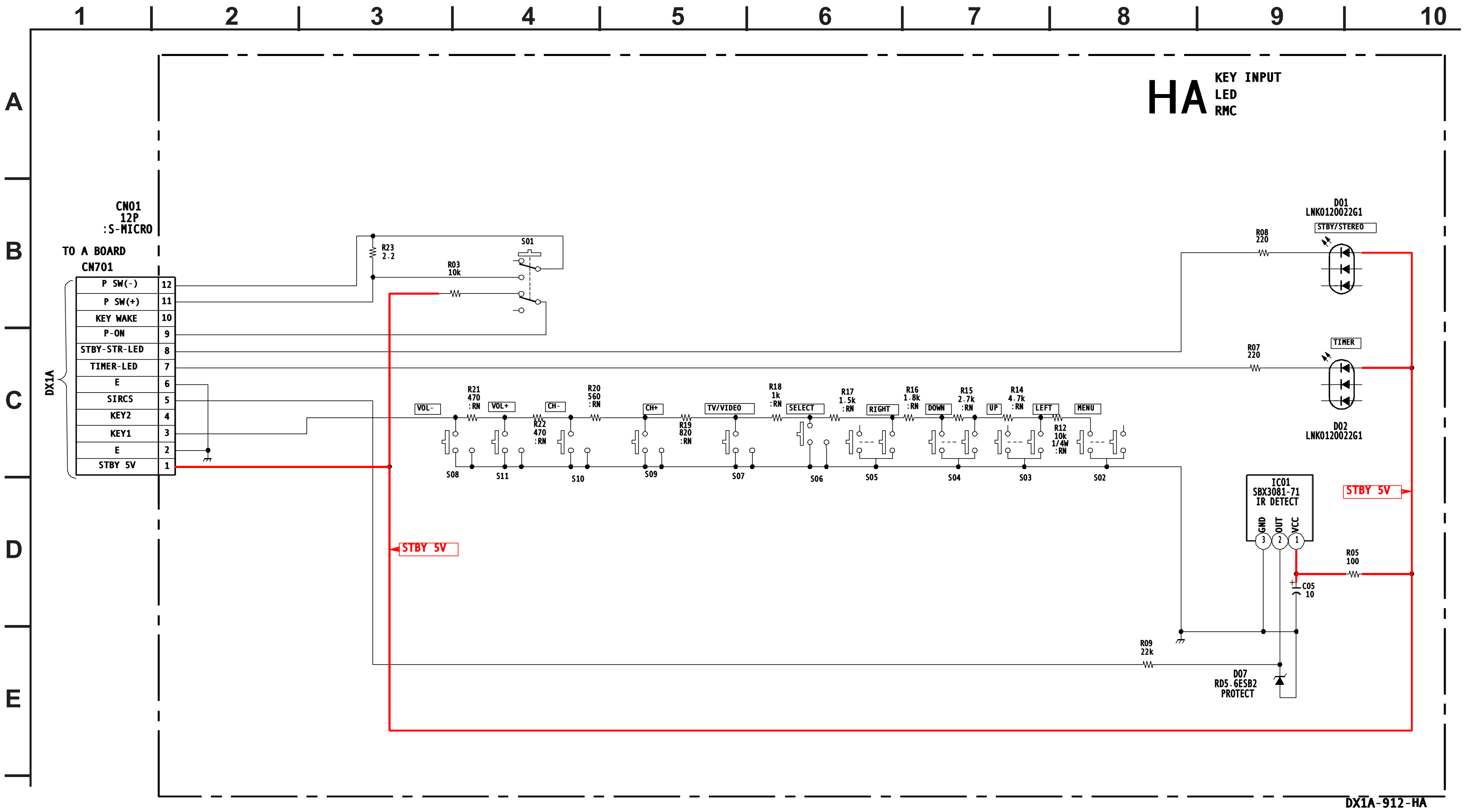
NOTE: # = Not Mounted

D BOARD IC VOLTAGE LIST

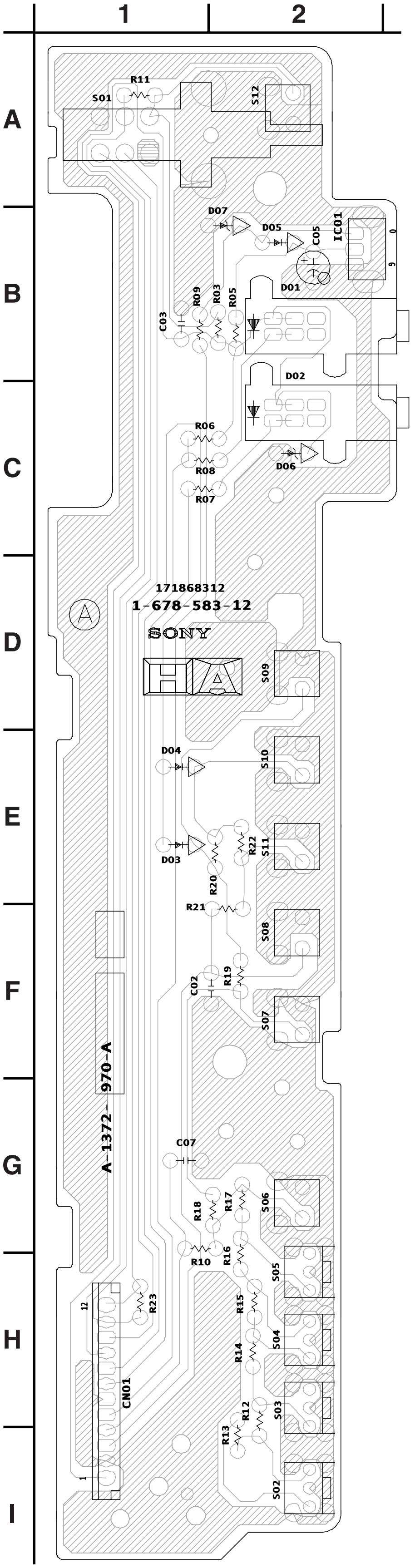
IC5001		IC5006		IC5502		IC5511		7	N/C	6	0.0	11	0.1
PIN	VOLT	PIN	VOLT	PIN	VOLT	PIN	VOLT	8	5.0	7	4.0	12	GND
1	11.0	I	7.8	1	5.4	1	4.6	9	5.0	8	17.2	13	0.1
2	11.0	G	GND	2	2.4	2	4.6	10	12.1	9	GND	14	0.1
3	N/C	O	6.3	3	12.1	3	N/C	11	4.0	10	10.4	IC8002	
4	GND	VC	N/C	4	3.6	4	4.2	12	5.0	11	0.0	PIN	VOLT
5	4.0	IC5007		5	3.4	5	9.0	13	5.0	12	4.6	1	1.6
6	4.0	PIN	VOLT	6	3.4	6	4.2	14	0.5	13	N/C	2	1.8
7	5.9	1	3.1	7	3.9	7	GND	15	1.1	14	163.6	3	2.2
8	12.1	2	0.6	8	N/C	8	4.2	16	4.6	15	153.5	4	2.5
IC5002		3	12.1	9	N/C	9	1.9	17	4.6	16	157.6	5	GND
PIN	VOLT	4	1.5	10	0.0	10	4.4	18	GND	17	N/C	6	0.0
1	0.1	5	2.3	11	0.0	11	4.4	IC5514		18	N/C	7	4.7
2	6.0	6	3.9	12	GND	12	6.4	PIN	VOLT	IC6503		8	15.6
3	3.8	7	2.8	13	3.7	13	N/C	1	0.3	PIN	VOLT	9	0.0
4	GND	8	0.0	14	N/C	14	8.2	2	0.3	1	134.0	10	10.4
5	2.3	9	3.0	IC5504		15	1.9	3	-12.0	2	N/C	11	GND
6	3.7	10	1.4	PIN	VOLT	16	4.0	4	0.7	3	2.5	12	4.5
7	2.9	11	6.1	1	4.2	17	4.9	5	9.0	4	11.8	13	N/C
8	12.1	12	GND	2	4.2	18	N/C	IC5515		5	GND	14	104.8
IC5003		13	2.5	3	GND	19	3.6	PIN	VOLT	IC6505		15	94.8
PIN	VOLT	14	0.6	4	5.5	20	9.0	1	3.4	PIN	VOLT	16	99.0
I	15.6	IC5008		5	9.0	21	0.9	2	3.4	1	134.9	17	N/C
G	GND	PIN	VOLT	IC5506		22	N/C	3	-9.6	2	15.7	18	198.0
O	12.1	1	9.1	PIN	VOLT	IC5512		4	-15.3	3	GND	IC8003	
IC5004		2	12.0	1	4.3	PIN	VOLT	5	GND	IC8001		PIN	VOLT
PIN	VOLT	3	GND	2	4.3	I	-15.8	6	12.0	PIN	VOLT	1	2.4
1	1.2	4	5.0	3	-15.5	G	GND	7	-14.0	1	0.1	2	GND
2	15.6	5	5.2	4	4.4	O	-12.0	8	2.7	2	0.0	3	11.0
3	-12.6	IC5501		5	9.0	IC5513		9	GND	3	15.6	IC8004	
4	-14.5	PIN	VOLT	IC5510		PIN	VOLT	IC6501		4	5.0	PIN	VOLT
5	0.2	1	GND	PIN	VOLT	1	4.5	PIN	VOLT	5	0.0	1	N/C
6	16.2	2	5.0	1	0.6	2	4.9	1	2.5	6	5.0	2	N/C
7	1.2	3	5.0	2	0.6	3	4.9	2	1.8	7	0.0	3	N/C
IC5005		4	GND	3	-11.9	4	4.6	3	2.2	8	5.0	4	GND
PIN	VOLT	5	4.6	4	2.4	5	5.0	4	2.5	9	4.2	5	7.1
1	100.0	6	4.6	5	12.1	6	5.0	5	GND	10	5.0	6	7.1
2	99.7	7	5.0									7	7.1
3	-95.3	8	5.0									8	15.2
4	100.0												
5	104.6												

All voltages are in V.

HA BOARD SCHEMATIC DIAGRAM



HA [KEY INPUT, LED, RMC]



HA BOARD IC VOLTAGE LIST

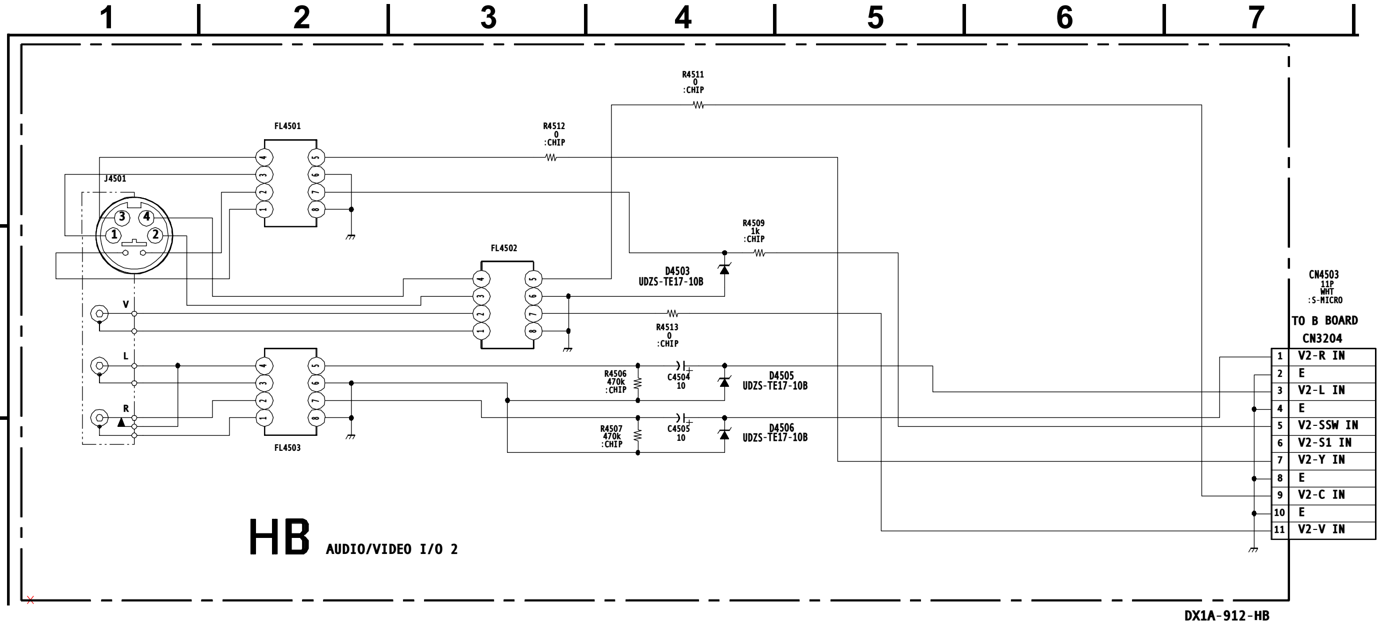
IC01	
PIN	VOLT
1	4.9
2	0.0
3	4.3

All voltages are in V.

HA BOARD LOCATOR LIST

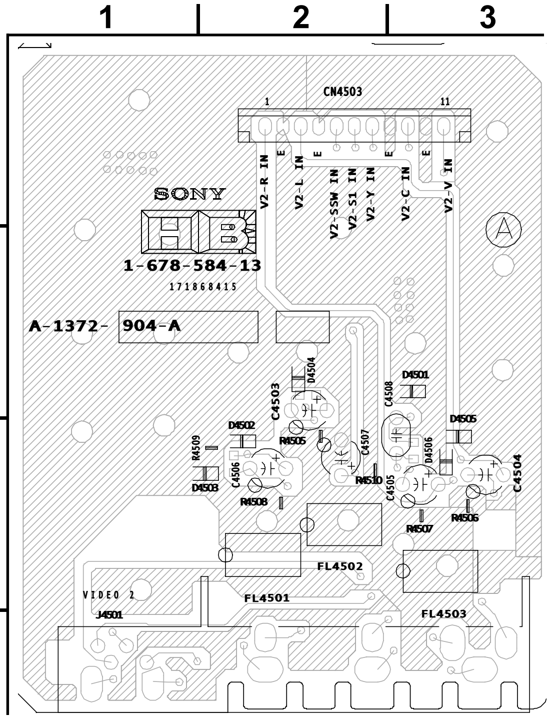
DIODE	
D01	B-2
D02	C-2
D07	B-2
IC	
IC01	B-3

HB BOARD SCHEMATIC DIAGRAM

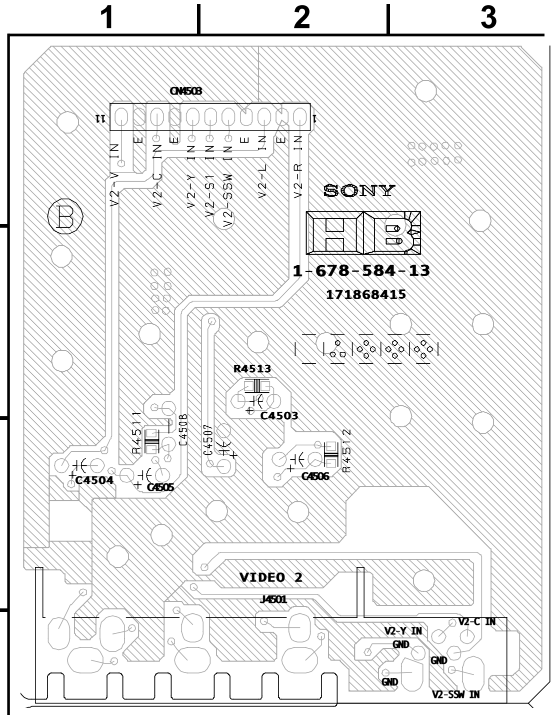


HB [AUDIO/VIDEO I/O 2]

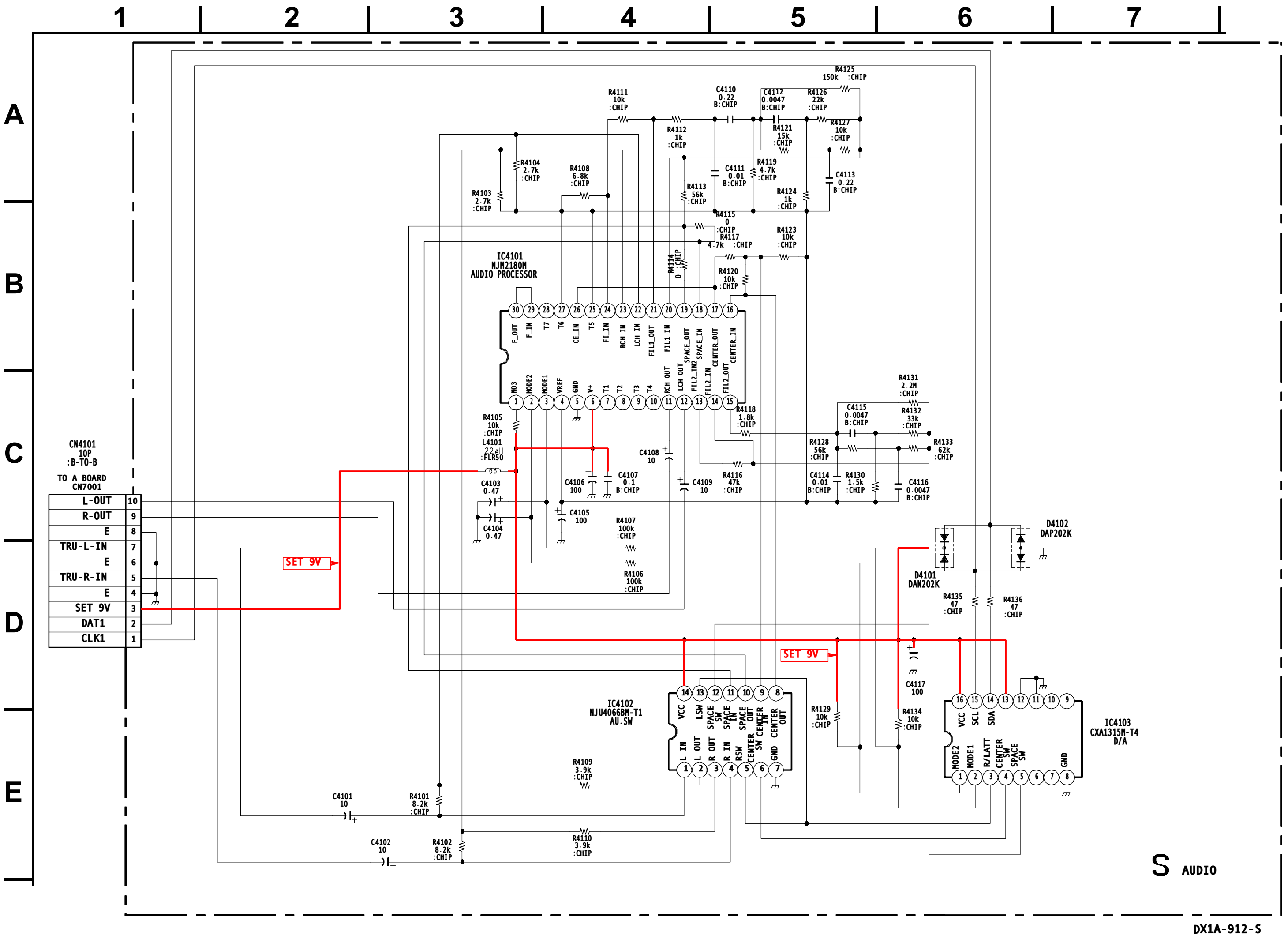
COMPONENT SIDE



CONDUCTOR SIDE

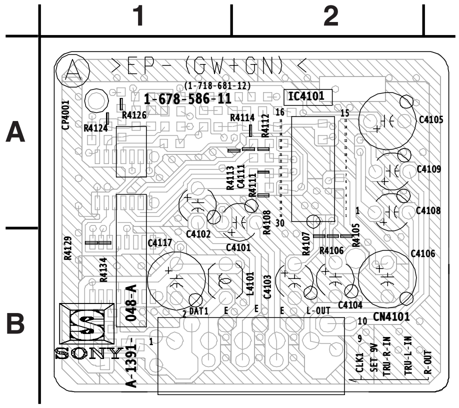


S BOARD SCHEMATIC DIAGRAM

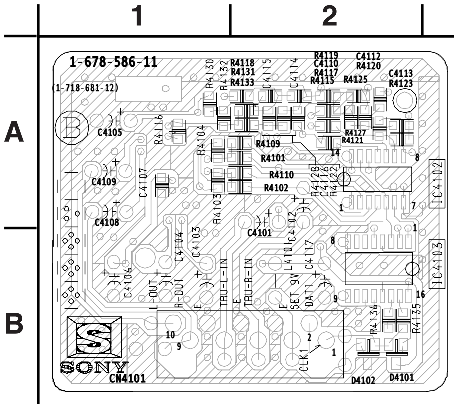


S [AUDIO]

COMPONENT SIDE



CONDUCTOR SIDE



S BOARD IC VOLTAGE LIST

IC4101

PIN	VOLT
1	8.4
2	0.1
3	0.1
4	4.5
5	GND
6	9.0
7	N/C
8	N/C
9	N/C
10	N/C
11	4.5
12	4.5
13	4.5
14	4.5
15	4.5
16	4.5
17	4.5
18	4.5
19	4.5
20	4.5
21	4.5
22	4.5
23	4.5
24	4.5
25	4.5
26	4.5
27	4.5
28	N/C
29	4.5
30	4.5

IC4102

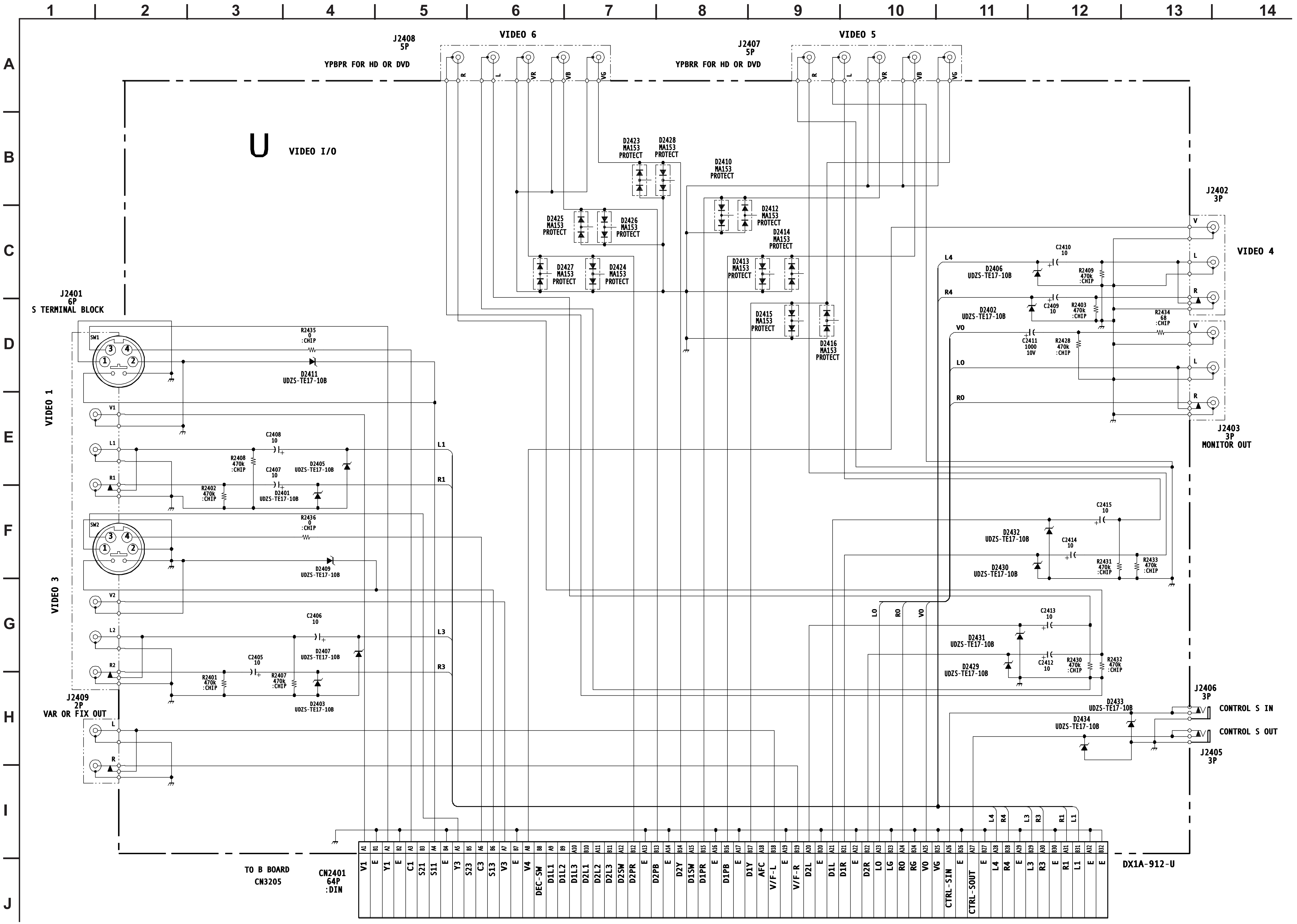
PIN	VOLT
1	4.5
2	4.5
3	4.5
4	4.5
5	8.6
6	0.3
7	GND
8	4.5
9	4.5
10	4.5
11	4.5
12	0.3
13	8.6
14	9.0

IC4103

PIN	VOLT
1	0.1
2	0.1
3	8.6
4	0.3
5	0.3
6	N/C
7	N/C
8	GND
9	N/C
10	N/C
11	GND
12	GND
13	9.0
14	4.5
15	4.5
16	9.0

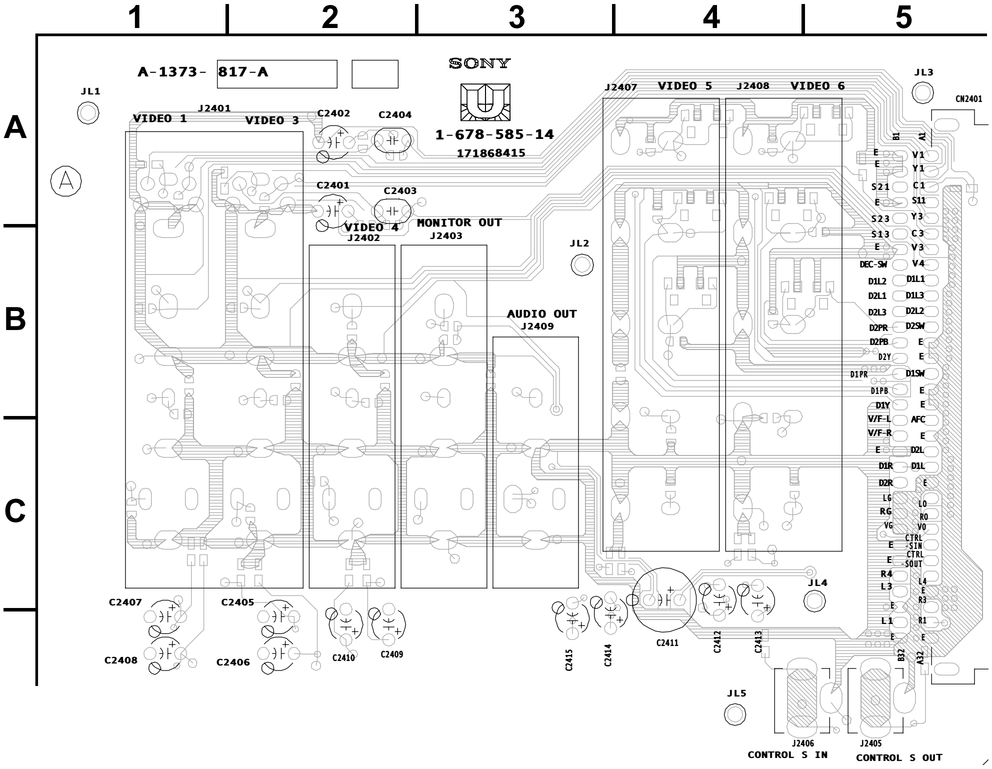
All voltages are in V.

U BOARD SCHEMATIC DIAGRAM

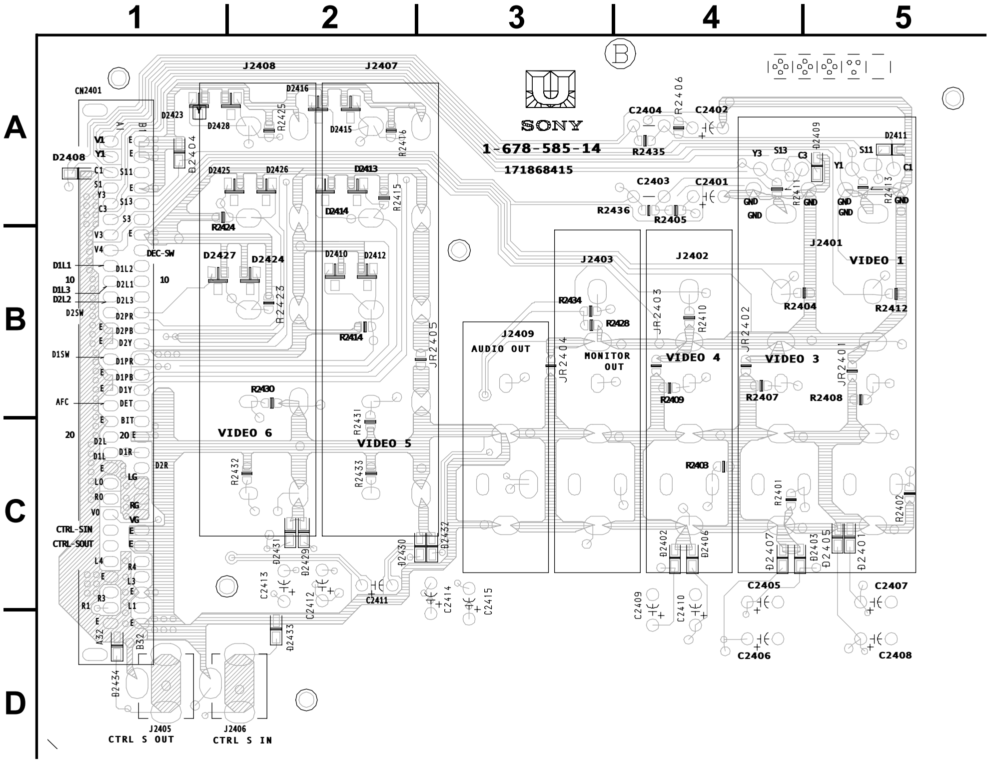


U [VIDEO I/O]

COMPONENT SIDE



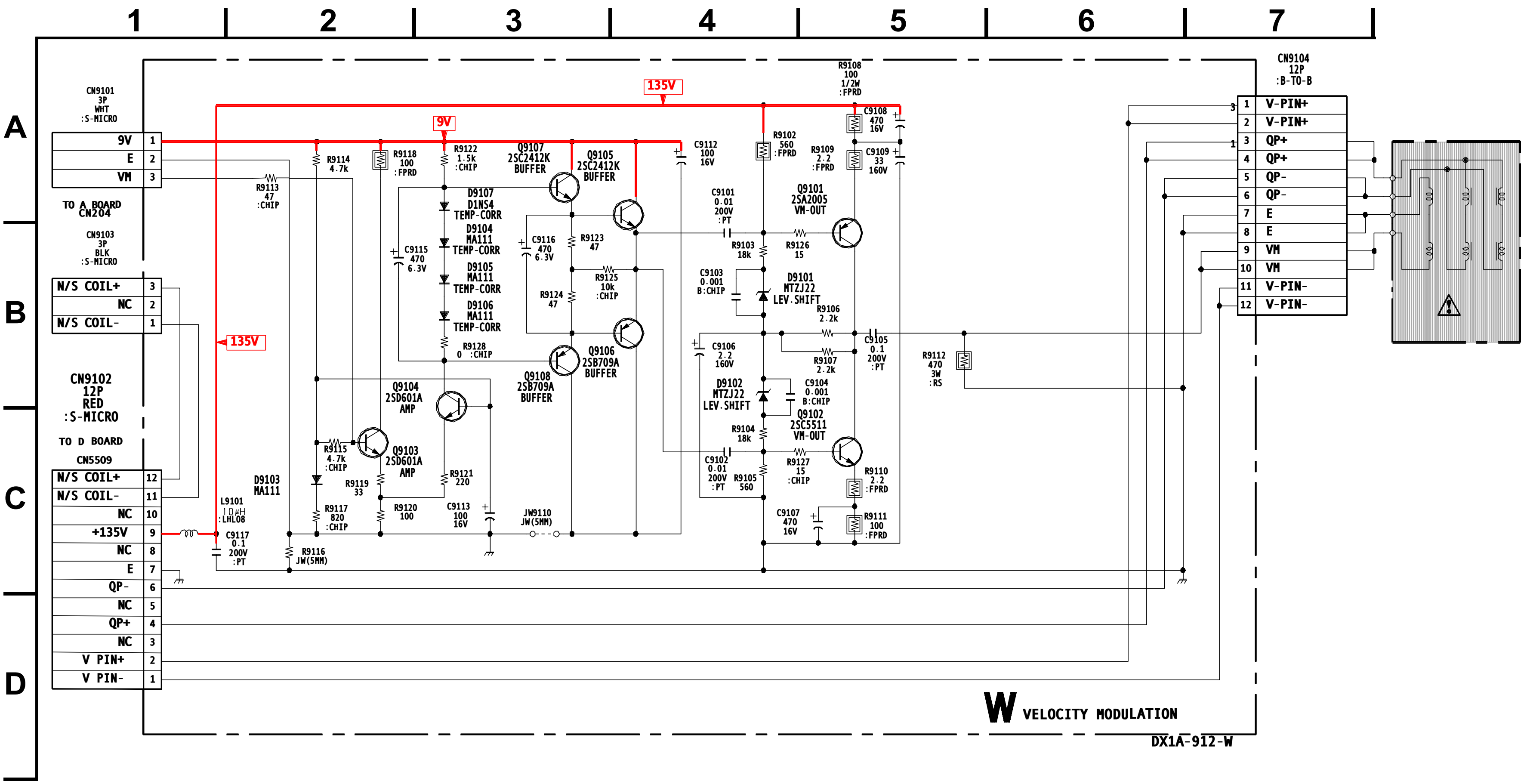
CONDUCTOR SIDE



U BOARD LOCATOR LIST

DIODE	
D2401	D-5
D2402	D-4
D2403	D-5
D2405	D-5
D2406	D-4
D2407	D-5
D2409	A-5
D2410	B-2
D2411	A-5
D2412	B-2
D2413	B-2
D2414	B-2
D2415	A-2
D2416	A-2
D2423	A-1
D2424	B-2
D2425	B-2
D2426	B-2
D2427	B-2
D2428	A-2
D2429	D-2
D2430	D-3
D2431	D-2
D2432	D-3
D2433	D-2
D2434	D-1

W BOARD SCHEMATIC DIAGRAM



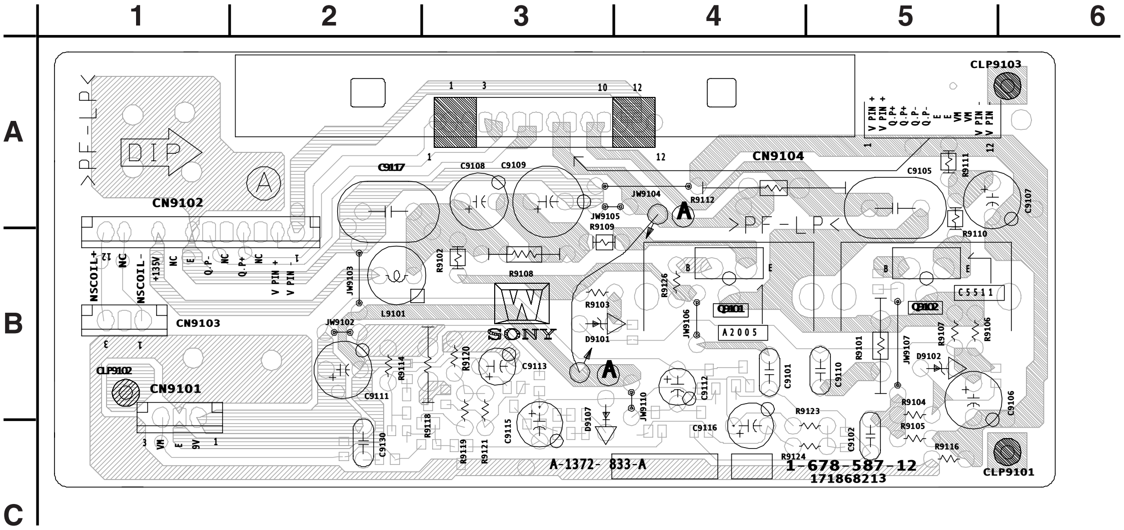
W BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q9101	133.8	67.5	134.3
Q9102	1.3	67.5	0.8
Q9103	2.9	0.0	9.0
Q9104	9.0	5.1	0.0
Q9105	5.1	9.0	4.7
Q9106	4.1	GND	4.7
Q9107	5.9	9.0	5.1
Q9108	3.5	GND	4.1

All voltages are in V.

W [VELOCITY MODULATION]

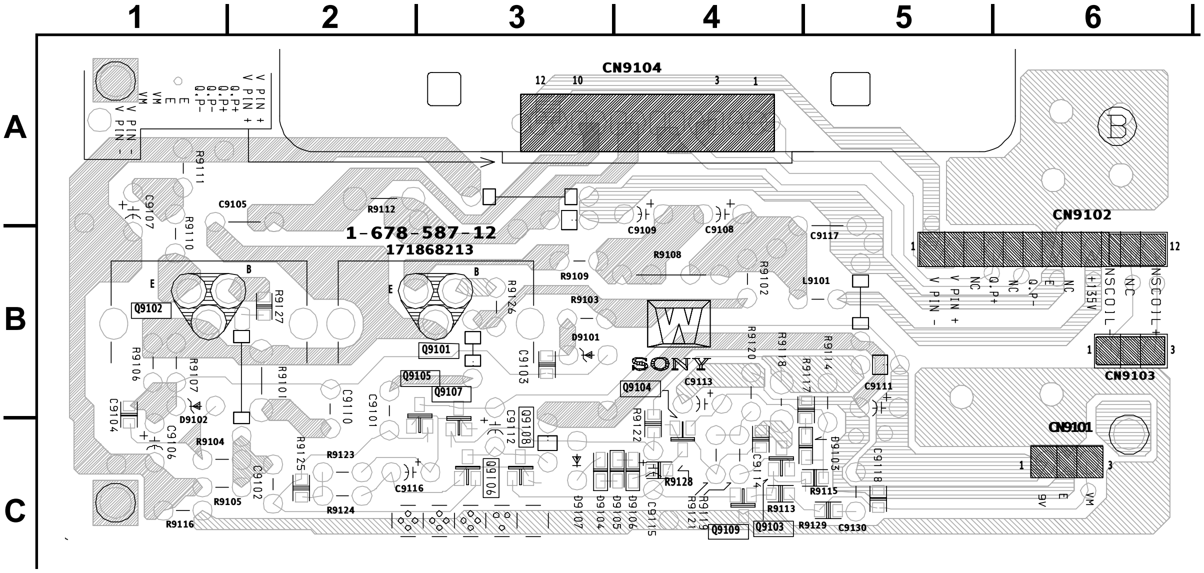
COMPONENT SIDE



W BOARD LOCATOR LIST (COMPONENT SIDE)

DIODE		TRANSISTOR	
D9101	B-4	Q9101	B-4
D9102	B-6	Q9102	B-6
D9107	C-4		

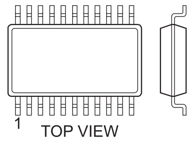
CONDUCTOR SIDE



W BOARD LOCATOR LIST (CONDUCTOR SIDE)

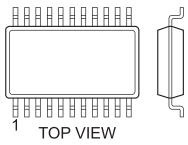
DIODE		D9106	C-3	Q9105	B-2
D9103	B-4	TRANSISTOR		Q9106	C-3
D9104	C-3	Q9103	C-4	Q9107	B-3
D9105	C-3	Q9104	B-4	Q9108	B-3

5-4. SEMICONDUCTORS (1 OF 2)



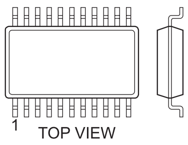
14pin

M52055FP
TLC2932IPW
TLC2933IPWR-12



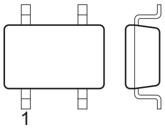
16pin

CXD2085M-T4
SN74LV4053ANSR



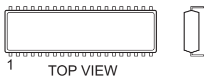
32pin

BH3868AFS-E2



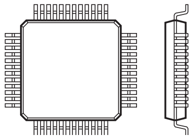
5pin

PST9120NL
PST9145NL
TC7SET08FU(TE85L)



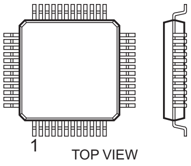
22pin

CXA2026AS



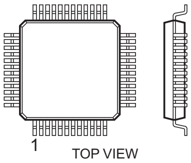
32pin

CXD2073Q-T4



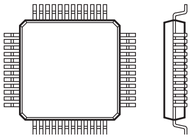
48pin

CXA2103Q
CXA2150Q



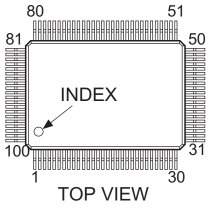
64pin

TLC5733AIPM

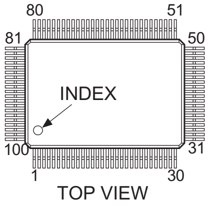


240pin

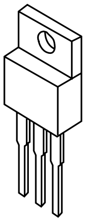
CXD9509AQ



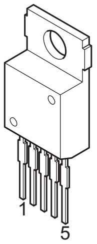
CXA2151Q



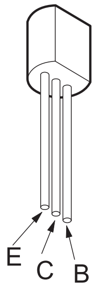
M306V2ME-153FP



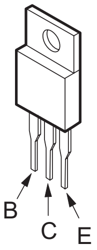
NJM79M12FA



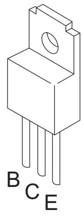
LA6500-FA



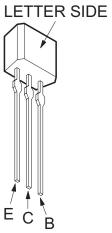
2SA1208S-TP
2SA1091O-TPE



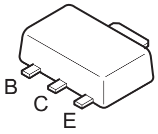
IRF614
IRFI644-G-LF36
IRFI9630GS



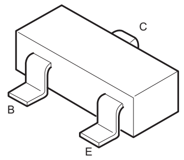
2SA2005
2SC5511



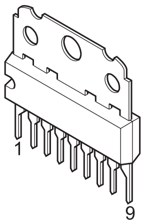
2SC3311A-QRSTA



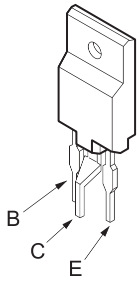
2SK2036(TE85L)



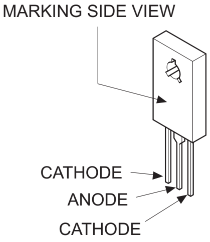
DTA114EKA-T146
DTC114TKA-T146
DTC144EKA-T146
2SA1226
2SD601A-QRS-TX
2SB709A-QRS-TX
2SC2412K-T-146-QR
2SD2114KT146



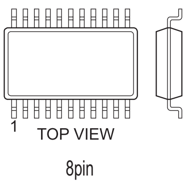
TDA6111Q/N4



2SC4632LS-CB7



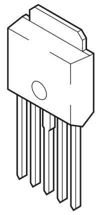
D5LC20U



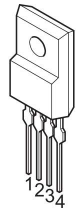
8pin

NJM2901M-TE2
NJM2903M-TE2
NJM2904M-TE2
NJM4558E(TE2)
TC7WU04FU(TE12R)

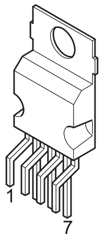
SEMICONDUCTORS (2 OF 2)



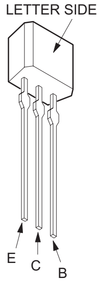
PQ07VZ012P



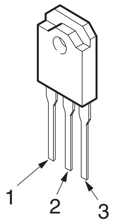
PQ09RD21
PQ05RF21
PQ12RF21
PQ30RV21



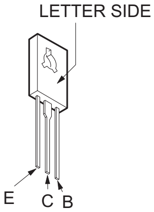
STV9379



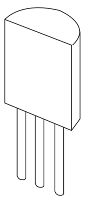
2SA1776TV2Q
2SA1309A-QRSTA



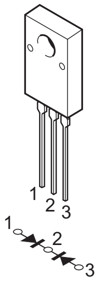
2SC3997S-SONY



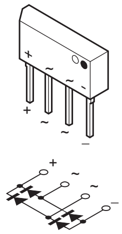
2SC2688-LK
2SC3840K



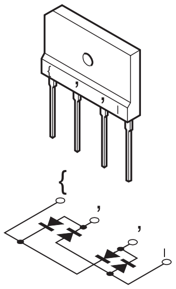
UPC1093J



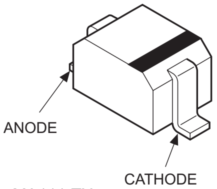
D5SC4M
D8LC40F



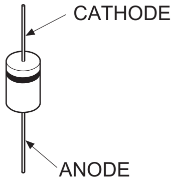
S1VB20



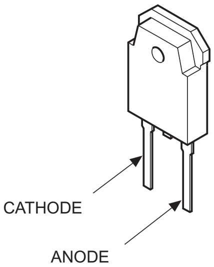
D1NL40-TA2
D6SB60L



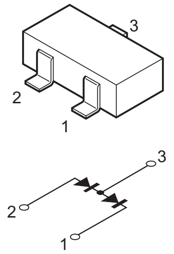
MA111-TX
MA113-TX
UDZSTE-1710B
UDZSTE-176.8B
UDZSTE-17-12



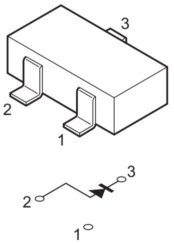
1SS133T-77
D1NL20U-TR
ERC91-02E



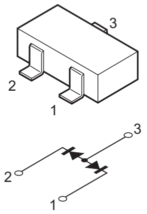
PG124S15



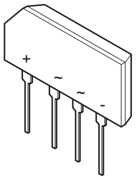
MA153-TX



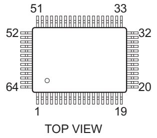
MA3091-TX



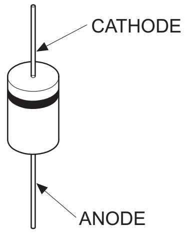
DAN202K-T-146



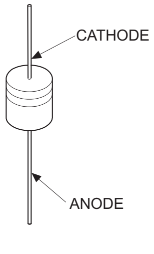
D4SBS6-F



CXA2069Q
CXP85840A-039Q



D1NL20U-TA2
ERA22-08TP3
ERC04-06SE
GP08DPKG23
HSS83TD
HZU11B1TRF
RGP02-20EL-6394
MTZJ-77-22B



D1NS4-TA2
MTZJ-T-77-15
MTZJ-T-77-15B
MTZJ-T-77-33B
MTZJ-T-77-10
MTZJ-T-77-12
MTZJ-T-77-13C
MTZJ-T-77-2.0A
MTZJ-T-77-22
MTZJ-T-77-3.0B
MTZJ-T-77-3.9B
MTZJ-T-77-33C
MTZJ-T-77-4.7B
MTZJ-T-77-5.1B
MTZJ-T-77-7.5B
RD5.6ES-T1B2

SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

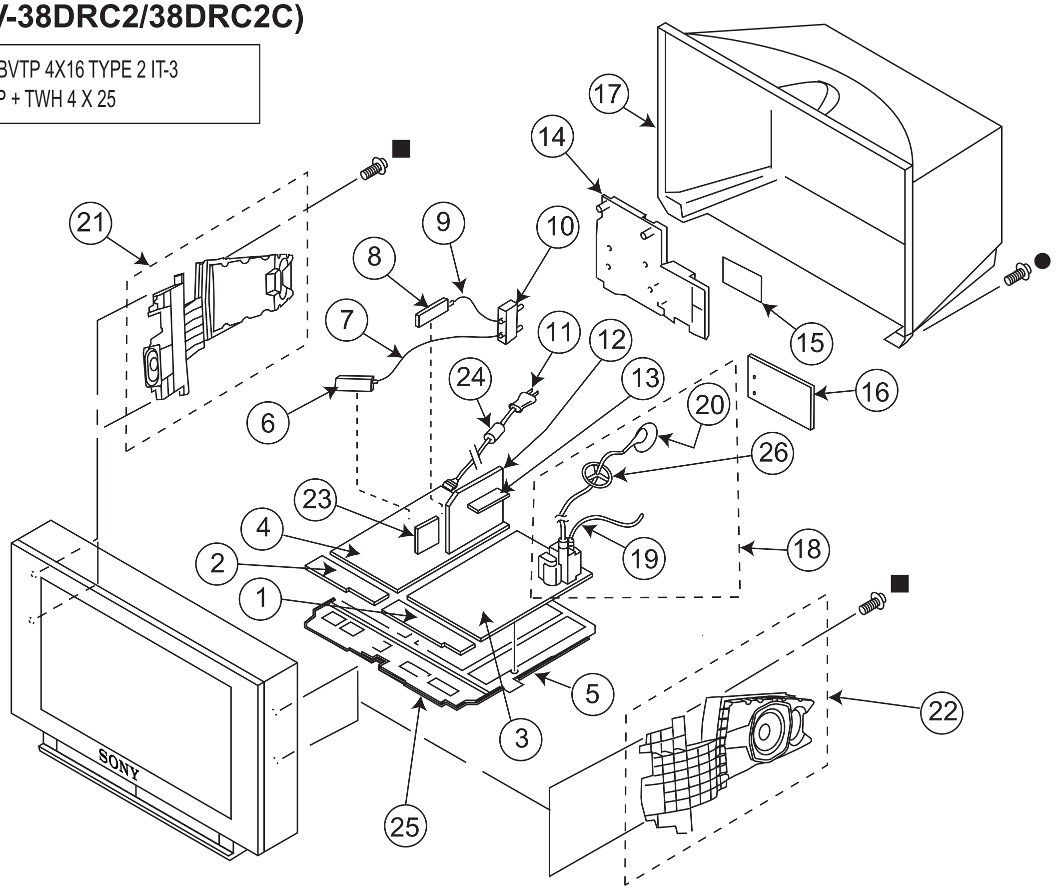
*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-1. CHASSIS (KV-38DRC2/38DRC2C)

●	7-685-663-79	SCREW + BVTP 4X16 TYPE 2 IT-3
■	4-064-929-02	SCREW, TP + TWH 4 X 25



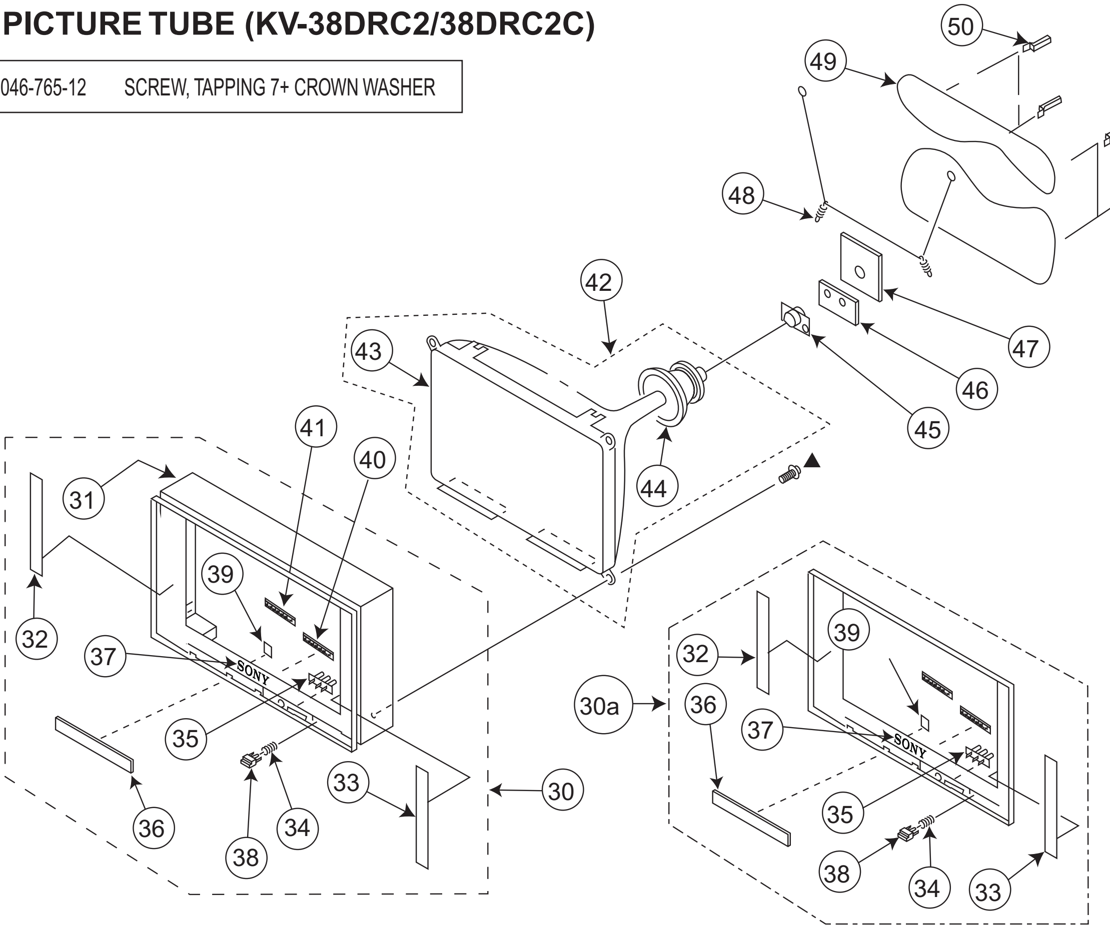
	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
*	1	A-1372-970-A	HA MOUNTED PC BOARD	
*	2	A-1372-904-A	HB (COM) MOUNTED PC BOARD	
*	3	A-1346-948-A	D COMPLETE PC BOARD (KV-38DRC2 ONLY)	
*	3	A-1346-956-A	D COMPLETE PC BOARD (KV-38DRC2C ONLY)	
			The high-voltage leads associated with the FBT on this board are not included and must be ordered separately (See 19-20).	
*	4	A-1299-481-A	A COMPLETE PC BOARD (KV-38DRC2 ONLY)	
*	4	A-1299-552-A	A COMPLETE PC BOARD (KV-38DRC2C ONLY)	
*	5	4-075-828-01	BRACKET, MAIN	
	6	8-598-501-30	TUNER, FSS BTF-FA402	
*	7	1-555-400-41	CABLE, PIN	
	8	8-598-542-20	TUNER, FSS BTF-WA412	
*	9	1-557-009-21	CABLE, P-P	
⚠	10	1-771-787-11	SWITCH, RF ANTENNA	
⚠	11	1-769-796-61	CORD, POWER (WITH CONNECTOR) (KV-38DRC2C ONLY)	
⚠	11	1-790-316-21	CORD, AC POWER (WITH CONNECTOR) (KV-38DRC2 ONLY)	
*	12	A-1136-200-A	B COMPLETE PC BOARD	
*	13	A-1136-117-A	BC COMPLETE PC BOARD	
*	14	4-075-829-01	BRACKET, U	
			The label associated with the U Bracket is not included and must be ordered separately (See 15).	
	15	4-077-820-01	LABEL, TERMINAL	
*	16	A-1373-817-A	U (COM) MOUNTED PC BOARD	
	17	4-075-833-01	COVER, REAR	
⚠	18	1-453-346-11	FBT ASSY NX-6000//J1J4	[19-20]
⚠	19	1-900-805-19	FOCUS LEAD	
⚠	20	1-251-715-22	HV CAP ASSY	
	21	1-529-812-31	SPEAKER BOX TYPE (5X9CM 12CM)	
	22	1-529-812-41	SPEAKER BOX TYPE (5X9CM 12CM)	
*	23	A-1391-048-A	S MOUNTED PC BOARD	
	24	1-500-386-11	FILTER, CLAMP (FERRITE CORE) (KV-38DRC2 ONLY)	
*	25	4-075-830-03	BRACKET, H	
	26	3-704-372-71	HOLDER, HV CABLE	

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-2. PICTURE TUBE (KV-38DRC2/38DRC2C)

▲ 4-046-765-12 SCREW, TAPPING 7+ CROWN WASHER



NOTE:
- **When replacing the CRT, please order Item (30) in order to replace the entire Beznet.**
- **When replacing only the Bezel, please order Item (30a) only.**

	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
	30	A-1017-301-A	BEZNET COMPLETE ASSY	[31-39]
	30a	A-1501-902-A	BEZEL COMPLETE ASSY	[32-39]
	31	4-075-832-01	CABINET	
	32		GRILL, SPEAKER (L)	
	33		GRILL, SPEAKER (R)	
	34	4-042-593-11	SPRING, COMPRESSION	
	35	4-075-823-01	GUIDE, LED	
	36	4-075-822-22	DOOR	
	37	3-704-179-81	EMBLEM (NO.9), SONY	
	38	4-075-824-21	BUTTON, POWER	
	39	4-076-673-03	DAMPER, DOOR	
	40	4-075-825-01	BUTTON, MULTI	
	41	4-075-826-01	BUTTON, MENU	
⚠	42	8-735-080-63	ITC 38RSN-C1E (KV-38DRC2C ONLY)	[43-44]
⚠	42	8-735-081-62	ITC 38RSN-C1M (KV-38DRC2 ONLY)	[43-44]
⚠	43	8-735-080-05	CRT 38RSN (KV-38DRC2C ONLY)	
⚠	43	8-735-081-05	CRT 38RSN (KV-38DRC2 ONLY)	

	REF. NO.	PART NO.	DESCRIPTION
⚠	44	8-451-516-11	DY Y38RSC-X
⚠	45	8-453-009-21	NA325-M2 (NECK ASSEMBLY)
*	46	A-1372-833-A	W MOUNTED PC BOARD
*	47	A-1332-075-A	C MOUNTED PC BOARD
	48	4-036-329-01	SPRING (B), TENSION
⚠	49	1-416-828-41	COIL, DEGAUSSING (KV-38DRC2 ONLY)
⚠	49	1-419-193-11	COIL, DEGAUSSING (KV-38DRC2C ONLY)
	50	4-065-895-04	HOLDER, DGC

SECTION 7: ELECTRICAL PARTS LIST

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components in this manual identified by the following symbol: ⧓ indicate parts that have been carefully factory-selected to satisfy regulations regarding X-ray radiation for each set.

Should replacement be required for one of these components, replace only with the value originally used.

*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

RESISTORS
- **All resistors are in ohms**
- **F : nonflammable**
- **All variable and adjustable resistors have characteristic curve B, unless otherwise noted.**

BC

When ordering parts by reference number, please include the board name.

BC

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
*		**A-1136-117-A**	**BC COMPLETE PC BOARD**			
		CAPACITOR				
	C3500	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3501	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
	C3502	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3504	1-163-102-00	CERAMIC CHIP	24pF	5%	50V
	C3505	1-163-102-00	CERAMIC CHIP	24pF	5%	50V
	C3506	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3507	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3509	1-163-038-91	CERAMIC CHIP	0.1μF		25V
	C3510	1-163-131-00	CERAMIC CHIP	390pF	5%	50V
	C3511	1-163-038-91	CERAMIC CHIP	0.1μF		25V
	C3512	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3513	1-216-295-91	SHORT			
	C3514	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3515	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3516	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3517	1-126-924-11	ELECT	330μF	20%	6.3V
	C3518	1-163-038-91	CERAMIC CHIP	0.1μF		25V
	C3519	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3520	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3521	1-163-237-11	CERAMIC CHIP	27pF	5%	50V
	C3522	1-126-947-11	ELECT	47μF	20%	16V
	C3523	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3524	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3525	1-163-038-91	CERAMIC CHIP	0.1μF		25V
	C3526	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3527	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3528	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3529	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3530	1-126-947-11	ELECT	47μF	20%	16V
	C3531	1-165-319-11	CERAMIC CHIP	0.1μF		50V
	C3532	1-126-964-11	ELECT	10μF	20%	50V
	C3533	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
	C3534	1-126-960-11	ELECT	1μF	20%	50V
	C3535	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
	C3536	1-126-960-11	ELECT	1μF	20%	50V
	C3537	1-126-964-11	ELECT	10μF	20%	50V
	C3538	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
	C3539	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
	C3541	1-163-106-00	CERAMIC CHIP	36pF	5%	50V
	C3542	1-126-964-11	ELECT	10μF	20%	50V
	C3543	1-164-505-11	CERAMIC CHIP	2.2μF		16V
	C3546	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
	C3547	1-126-935-11	ELECT	470μF	20%	16V
	C3548	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
	C3549	1-126-947-11	ELECT	47μF	20%	16V
	C3550	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3551	1-126-947-11	ELECT	47μF	20%	16V
	C3552	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3553	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3554	1-126-947-11	ELECT	47μF	20%	16V
	C3555	1-126-935-11	ELECT	470μF	20%	16V
	C3556	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
	C3557	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3558	1-126-947-11	ELECT	47μF	20%	16V
	C3559	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3560	1-126-947-11	ELECT	47μF	20%	16V
	C3561	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3562	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3563	1-126-947-11	ELECT	47μF	20%	16V
	C3564	1-126-947-11	ELECT	47μF	20%	16V
	C3565	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3566	1-163-031-91	CERAMIC CHIP	0.01μF		50V
		CONNECTOR				
*	CN3500	1-691-632-21	CONNECTOR, BOARD TO BOARD 15P			
		FERRITE BEAD				
	FB3500	1-414-234-22	FERRITE	0μH		
	FB3501	1-414-234-22	FERRITE	0μH		
	FB3502	1-414-234-22	FERRITE	0μH		
	FB3503	1-414-234-22	FERRITE	0μH		

BC

REF. NO.	PART NO.	DESCRIPTION	VALUES		
FB3504	1-414-234-22	FERRITE	0µH		
FB3505	1-414-234-22	FERRITE	0µH		
FB3506	1-414-234-22	FERRITE	0µH		
FB3507	1-414-234-22	FERRITE	0µH		
FB3508	1-414-234-22	FERRITE	0µH		
FB3509	1-414-234-22	FERRITE	0µH		
	FILTER				
FL3500	1-239-848-21	FILTER, LOW PASS			
FL3501	1-239-848-21	FILTER, LOW PASS			
FL3502	1-239-848-21	FILTER, LOW PASS			
FL3503	1-239-848-21	FILTER, LOW PASS			
FL3504	1-233-512-21	FERRITE	37µH		
FL3505	1-233-512-21	FERRITE	37µH		
FL3506	1-233-512-21	FERRITE	37µH		
	IC				
IC3500	8-759-473-05	IC UPD424210LE-60-E2			
IC3501	8-759-594-44	IC UPD64082GF-3BA			
IC3502	8-759-641-30	IC NJM2391DL1-33-TEI			
	COIL				
L3500	1-414-265-21	INDUCTOR	4.7µH		
L3501	1-412-058-11	INDUCTOR	10µH		
L3502	1-412-058-11	INDUCTOR	10µH		
L3503	1-412-058-11	INDUCTOR	10µH		
L3504	1-412-058-11	INDUCTOR	10µH		
L3505	1-412-058-11	INDUCTOR	10µH		
	TRANSISTOR				
Q3500	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3501	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3502	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3503	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3504	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3505	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3506	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3508	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3509	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3510	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3511	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3512	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3513	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3514	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3515	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3516	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3517	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	RESISTOR				
R3503	1-216-017-91	RES-CHIP	47	5%	1/10W
R3504	1-216-295-91	SHORT			
R3505	1-216-295-91	SHORT			
R3506	1-216-295-91	SHORT			
R3507	1-216-295-91	SHORT			
R3508	1-216-295-91	SHORT			
R3509	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3510	1-216-041-00	RES-CHIP	470	5%	1/10W
R3511	1-216-041-00	RES-CHIP	470	5%	1/10W
R3512	1-216-295-91	SHORT			
R3514	1-216-025-11	RES-CHIP	100	5%	1/10W
R3515	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R3516	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R3517	1-216-025-11	RES-CHIP	100	5%	1/10W
R3518	1-216-025-11	RES-CHIP	100	5%	1/10W
R3519	1-216-295-91	SHORT			
R3520	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R3521	1-216-041-00	RES-CHIP	470	5%	1/10W
R3522	1-216-041-00	RES-CHIP	470	5%	1/10W
R3523	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3524	1-216-089-91	RES-CHIP	47K	5%	1/10W
R3525	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3526	1-216-105-91	RES-CHIP	220K	5%	1/10W
R3527	1-216-033-00	RES-CHIP	220	5%	1/10W
R3528	1-208-776-11	METAL CHIP	560	0.50%	1/10W
R3529	1-208-772-11	METAL CHIP	390	0.50%	1/10W
R3530	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R3531	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3532	1-216-025-11	RES-CHIP	100	5%	1/10W
R3534	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3535	1-216-025-11	RES-CHIP	100	5%	1/10W
R3538	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3539	1-216-043-91	RES-CHIP	560	5%	1/10W
R3540	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3541	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R3542	1-216-043-91	RES-CHIP	560	5%	1/10W
R3543	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3544	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3545	1-216-043-91	RES-CHIP	560	5%	1/10W
R3547	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R3548	1-216-295-91	SHORT			
R3549	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3550	1-208-780-11	METAL CHIP	820	0.50%	1/10W
R3551	1-216-043-91	RES-CHIP	560	5%	1/10W
R3552	1-216-031-00	RES-CHIP	180	5%	1/10W
R3553	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3554	1-216-047-91	RES-CHIP	820	5%	1/10W
R3555	1-216-075-00	RES-CHIP	12K	5%	1/10W
R3556	1-216-085-91	RES-CHIP	33K	5%	1/10W
R3557	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3558	1-216-017-91	RES-CHIP	47	5%	1/10W

BC B

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3559	1-216-295-91	SHORT			
R3560	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3561	1-216-043-91	RES-CHIP	560	5%	1/10W
R3563	1-216-295-91	SHORT			
R3564	1-216-295-91	SHORT			
R3565	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R3566	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3567	1-216-043-91	RES-CHIP	560	5%	1/10W
R3568	1-216-047-91	RES-CHIP	820	5%	1/10W
R3569	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3570	1-216-085-91	RES-CHIP	33K	5%	1/10W
R3571	1-216-075-00	RES-CHIP	12K	5%	1/10W
R3572	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3573	1-216-017-91	RES-CHIP	47	5%	1/10W
R3588	1-216-043-91	RES-CHIP	560	5%	1/10W
R3589	1-216-105-91	RES-CHIP	220K	5%	1/10W

CRYSTAL

REF. NO.	PART NO.	DESCRIPTION	VALUES
X3500	1-767-606-11	VIBRATOR, CRYSTAL	

B

*	**A-1136-200-A**	**B COMPLETE PC BOARD**	

CAPACITOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3001	1-128-453-21	ELECT CHIP	47μF	20%	6.3V
C3002	1-128-453-21	ELECT CHIP	47μF	20%	6.3V
C3003	1-128-453-21	ELECT CHIP	47μF	20%	6.3V
C3004	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3005	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3006	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3007	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3008	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3009	1-164-227-11	CERAMIC CHIP	0.022μF	10%	25V
C3010	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3011	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3012	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3013	1-104-601-11	ELECT CHIP	10μF	20%	10V
C3014	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3015	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3016	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3017	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3018	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3019	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3020	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C3021	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3022	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3023	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3024	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3025	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3026	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3027	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3028	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3030	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3031	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3032	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3033	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3034	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3035	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3036	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3037	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3039	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3040	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3041	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C3043	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3044	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3045	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3046	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C3047	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C3048	1-163-038-91	CERAMIC CHIP	0.1μF		25V
C3049	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C3050	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C3051	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3054	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3055	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3056	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3057	1-126-603-11	ELECT CHIP	4.7μF	20%	35V
C3059	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3060	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3061	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3062	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3063	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3064	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3066	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3067	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C3068	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C3069	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3070	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3071	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3072	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3073	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3074	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3075	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C3076	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3078	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3079	1-125-838-11	CERAMIC CHIP	2.2μF	10%	6.3V
C3080	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3081	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3082	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3083	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C3085	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C3086	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3087	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C3088	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3089	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3090	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3091	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3092	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3093	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3094	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3096	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3097	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3098	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3099	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C3113	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3114	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3115	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3116	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3117	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C3120	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3127	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3128	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3129	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C3130	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C3131	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C3132	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3133	1-125-838-11	CERAMIC CHIP	2.2µF	10%	6.3V
C3134	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3135	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3136	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C3137	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C3138	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3139	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C3140	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3141	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3142	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3172	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3173	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3204	1-126-193-11	ELECT CHIP	1µF	20%	50V
C3205	1-117-681-11	ELECT CHIP	100µF	20%	16V
C3206	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C3208	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C3209	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3210	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C3211	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3212	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3213	1-117-681-11	ELECT CHIP	100µF	20%	16V
C3215	1-126-401-21	ELECT CHIP	1µF	20%	50V
C3216	1-126-193-11	ELECT CHIP	1µF	20%	50V
C3218	1-126-193-11	ELECT CHIP	1µF	20%	50V
C3219	1-126-193-11	ELECT CHIP	1µF	20%	50V
C3220	1-128-993-21	ELECT CHIP	22µF	20%	10V
C3221	1-117-681-11	ELECT CHIP	100µF	20%	16V
C3222	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3223	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3224	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3225	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3226	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3227	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3229	1-117-681-11	ELECT CHIP	100µF	20%	16V
C3235	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3236	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3237	1-117-681-11	ELECT CHIP	100µF	20%	16V
C3239	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3240	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3241	1-164-361-11	CERAMIC CHIP	0.047µF		25V
C3242	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3243	1-126-193-11	ELECT CHIP	1µF	20%	50V
C3245	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3246	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3247	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3248	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3249	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3250	1-216-295-91	SHORT			
C3251	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3252	1-216-295-91	SHORT			
C3253	1-127-573-11	CERAMIC CHIP	1µF	10%	16V
C3254	1-127-573-11	CERAMIC CHIP	1µF	10%	16V
C3255	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3301	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3302	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3303	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3304	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3305	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3306	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3307	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3308	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3309	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3310	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3311	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3312	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3313	1-164-156-11	CERAMIC CHIP	0.1µF		25V

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3314	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3315	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3316	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3317	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3318	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3319	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3320	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3321	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3322	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3323	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3324	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3325	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3326	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3327	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3328	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3331	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3332	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3333	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3335	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3336	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3338	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3339	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3340	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3341	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3343	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3344	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3345	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3346	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3347	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3348	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3349	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3350	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3351	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3352	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3353	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3354	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3355	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3356	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3357	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3358	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3359	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3360	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3361	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3362	1-127-760-11	CERAMIC CHIP	4.7µF	10%	6.3V
C3363	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3364	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3365	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3366	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3367	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3368	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3369	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3370	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3371	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3372	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3374	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3375	1-127-760-11	CERAMIC CHIP	4.7µF	10%	6.3V
C3376	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3377	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3378	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3379	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3401	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3402	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3403	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3404	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3405	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3406	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3407	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3408	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3409	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3410	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3411	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C3412	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C3413	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3414	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3415	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3416	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3417	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3418	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3419	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3420	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3421	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3422	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3423	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3424	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3425	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C3426	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3428	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3429	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3430	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3431	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3432	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3433	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3434	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3435	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3436	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3437	1-126-204-11	ELECT CHIP	47µF	20%	16V

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3438	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3439	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3440	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3441	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3442	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3443	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3444	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3445	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3446	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3447	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3448	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3449	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3450	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3452	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3453	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3454	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3455	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3456	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3457	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3458	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3460	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C3462	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3463	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3464	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3465	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3466	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3467	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3468	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3469	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3470	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3473	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3474	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3475	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3476	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3477	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3478	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3479	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3480	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3481	1-117-681-11	ELECT CHIP	100µF	20%	16V
C3482	1-117-681-11	ELECT CHIP	100µF	20%	16V
C3483	1-117-681-11	ELECT CHIP	100µF	20%	16V
C3484	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C3485	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3486	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3487	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3488	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3489	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3490	1-124-779-00	ELECT CHIP	10µF	20%	16V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3491	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3492	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3493	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3494	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3495	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3496	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3604	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3605	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3606	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C3607	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3608	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C3609	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C3610	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3611	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3612	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3613	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3618	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3619	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3623	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C3624	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3625	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C3626	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C3627	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3628	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3629	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3630	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3635	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3636	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C3637	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3638	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3639	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3640	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C3641	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3642	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3643	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3644	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3652	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3653	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3654	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3655	1-164-816-11	CERAMIC CHIP	220pF	2%	50V
C3656	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3657	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C3658	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C3659	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3660	1-126-204-11	ELECT CHIP	47µF	20%	16V

B

	REF. NO.	PART NO.	DESCRIPTION	VALUES
		CONNECTOR		
*	CN3201	1-691-616-21	CONNECTOR, BOARD TO BOARD 15P	
	CN3202	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P	
*	CN3203	1-785-303-11	CONNECTOR, DIN (PLUG) 64P	
*	CN3204	1-564-526-11	PLUG,CONNECTOR 11P	
*	CN3205	1-785-304-11	CONNECTOR, DIN (RECEPTACLE) 64P	
		DIODE		
	D3001	8-719-978-33	DIODE UDZSTE-176.8B	
	D3002	8-719-978-33	DIODE UDZSTE-176.8B	
	D3003	8-719-978-33	DIODE UDZSTE-176.8B	
	D3004	8-719-978-33	DIODE UDZSTE-176.8B	
	D3005	8-719-978-33	DIODE UDZSTE-176.8B	
	D3006	8-719-978-33	DIODE UDZSTE-176.8B	
	D3007	8-719-978-33	DIODE UDZSTE-176.8B	
	D3089	8-719-800-76	DIODE MA153-TX	
	D3090	8-719-800-76	DIODE MA153-TX	
	D3201	8-719-977-28	DIODE UDZSTE-1710B	
	D3202	8-719-977-28	DIODE UDZSTE-1710B	
	D3204	8-719-977-28	DIODE UDZSTE-1710B	
	D3205	8-719-977-28	DIODE UDZSTE-1710B	
	D3206	8-719-977-28	DIODE UDZSTE-1710B	
	D3209	8-719-914-44	DIODE DAP202K-T-146	
	D3210	8-719-041-97	DIODE MA113-(TX)	
	D3211	8-719-404-50	DIODE MA111-TX	
	D3212	8-719-977-28	DIODE UDZSTE-1710B	
	D3213	8-719-977-28	DIODE UDZSTE-1710B	
	D3214	8-719-977-28	DIODE UDZSTE-1710B	
	D3215	8-719-977-28	DIODE UDZSTE-1710B	
	D3216	8-719-977-28	DIODE UDZSTE-1710B	
	D3217	8-719-977-28	DIODE UDZSTE-1710B	
	D3301	8-719-056-77	DIODE UDZ-TE-17-3.9B	
	D3401	8-719-914-43	DIODE DAN202K-T-146	
	D3402	8-719-914-44	DIODE DAP202K-T-146	
	D3403	8-719-978-33	DIODE UDZSTE-176.8B	
		FERRITE BEAD		
	FB3201	1-414-234-22	FERRITE	0μH
	FB3202	1-414-234-22	FERRITE	0μH
	FB3203	1-216-295-91	SHORT	
	FB3204	1-414-234-22	FERRITE	0μH
	FB3205	1-414-234-22	FERRITE	0μH
	FB3206	1-414-234-22	FERRITE	0μH
	FB3401	1-414-235-22	FERRITE	0μH
	FB3402	1-414-235-22	FERRITE	0μH
	FB3601	1-414-235-22	FERRITE	0μH
	FB3603	1-414-533-21	INDUCTOR	8.2μH

REF. NO.	PART NO.	DESCRIPTION	VALUES
	FILTER		
FL3001	1-239-848-11	FILTER, LOW PASS	
FL3002	1-239-848-11	FILTER, LOW PASS	
FL3003	1-781-923-11	FILTER, LOW PASS (SMD)	
FL3004	1-239-848-11	FILTER, LOW PASS	
FL3401	1-781-923-21	FILTER, LOW PASS (SMD)	
	IC		
IC3001	8-752-093-84	IC CXA2151Q	
IC3002	8-759-595-97	IC SN74LV4053ANSR	
IC3003	8-752-394-69	IC CXD2073Q-T4	
IC3004	8-759-595-97	IC SN74LV4053ANSR	
IC3048	8-752-089-50	IC CXA2103Q	
IC3089	6-700-149-01	IC M24C04-MN6T(A)	
IC3090	6-800-050-01	IC MB94918RpF-G-137-BND	
IC3091	8-759-349-11	IC PST9145NL	
IC3110	8-752-089-50	IC CXA2103Q	
IC3201	8-752-080-04	IC CXA2069Q	
IC3202	8-759-351-01	IC TEA6422DT	
IC3203	8-759-331-71	IC NJM4558E(TE2)	
IC3301	6-700-134-01	IC IS42S16100-7T	
IC3302	8-749-015-18	IC PQ07VZ012P	
IC3303	8-752-409-78	IC CXD2095AQ	
IC3304	8-759-447-90	IC TLC5733AIPM	
IC3305	8-759-669-75	IC TLC2932IPWR	
IC3306	8-759-669-78	IC TLC2933IPWR-12	
IC3401	8-749-015-18	IC PQ07VZ012P	
IC3402	8-759-675-89	IC TC59S6432CFT-80(YB)	
IC3403	8-759-460-29	IC PST9120NL	
IC3404	8-759-669-75	IC TLC2932IPWR	
IC3405	8-759-485-79	IC TC7SET08FU(TE85R)	
IC3406	8-759-485-79	IC TC7SET08FU(TE85R)	
IC3407	8-759-485-79	IC TC7SET08FU(TE85R)	
IC3408	8-759-672-57	IC CXD9509AQ	
IC3409	8-749-015-18	IC PQ07VZ012P	
IC3410	8-752-367-59	IC CXD2309Q	
IC3411	8-759-082-57	IC TC7W04FU(TE12R)	
IC3412	8-759-082-58	IC TC7W08FU(TE12R)	
IC3413	8-759-595-97	IC SN74LV4053ANSR	
IC3414	8-759-548-56	IC M52055FP	
IC3601	8-752-916-40	IC CXP85840A-039Q	
IC3602	8-752-916-40	IC CXP85840A-039Q	
IC3603	8-752-395-13	IC CXD2085M-T4	
IC3604	8-759-700-07	IC NJM2903M-TE2	
	COIL		
L3001	1-216-295-91	SHORT	
L3002	1-469-555-21	INDUCTOR	10μH
L3003	1-469-555-21	INDUCTOR	10μH

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REF. NO.	PART NO.	DESCRIPTION	VALUES
L3004	1-469-555-21	INDUCTOR	10µH
L3005	1-469-555-21	INDUCTOR	10µH
L3049	1-469-555-21	INDUCTOR	10µH
L3050	1-469-555-21	INDUCTOR	10µH
L3051	1-469-555-21	INDUCTOR	10µH
L3089	1-414-233-22	FERRITE	0µH
L3112	1-469-555-21	INDUCTOR	10µH
L3113	1-469-555-21	INDUCTOR	10µH
L3301	1-412-058-11	INDUCTOR	10µH
L3302	1-469-555-21	INDUCTOR	10µH
L3303	1-412-052-21	INDUCTOR	1µH
L3304	1-469-555-21	INDUCTOR	10µH
L3305	1-469-555-21	INDUCTOR	10µH
L3306	1-469-561-21	INDUCTOR	100µH
L3307	1-469-555-21	INDUCTOR	10µH
L3308	1-469-561-21	INDUCTOR	100µH
L3309	1-469-561-21	INDUCTOR	100µH
L3310	1-469-561-21	INDUCTOR	100µH
L3311	1-469-561-21	INDUCTOR	100µH
L3312	1-469-555-21	INDUCTOR	10µH
L3401	1-412-052-21	INDUCTOR	1µH
L3402	1-412-052-21	INDUCTOR	1µH
L3403	1-469-561-21	INDUCTOR	100µH
L3404	1-469-561-21	INDUCTOR	100µH
L3405	1-469-555-21	INDUCTOR	10µH
L3406	1-469-555-21	INDUCTOR	10µH
L3407	1-469-555-21	INDUCTOR	10µH
L3409	1-469-555-21	INDUCTOR	10µH
L3410	1-412-052-21	INDUCTOR	1µH
L3411	1-412-058-11	INDUCTOR	10µH
L3412	1-469-555-21	INDUCTOR	10µH
L3413	1-469-555-21	INDUCTOR	10µH
L3414	1-469-555-21	INDUCTOR	10µH
L3416	1-469-555-21	INDUCTOR	10µH
L3601	1-469-555-21	INDUCTOR	10µH
L3602	1-412-951-11	INDUCTOR	10µH
L3603	1-469-555-21	INDUCTOR	10µH
L3604	1-412-951-11	INDUCTOR	10µH
L3605	1-469-555-21	INDUCTOR	10µH
L3606	1-469-555-21	INDUCTOR	10µH
L3607	1-469-555-21	INDUCTOR	10µH
L3608	1-414-754-11	INDUCTOR	10µH
L3609	1-414-754-11	INDUCTOR	10µH
	TRANSISTOR		
Q3001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3002	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3003	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	

REF. NO.	PART NO.	DESCRIPTION	VALUES
Q3005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3006	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3007	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3008	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3009	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3010	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3011	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3014	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3015	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3016	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3017	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3018	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3021	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3022	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3023	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3025	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3026	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3027	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3035	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3036	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3037	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3038	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3039	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3040	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3049	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3051	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3053	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3054	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3056	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3058	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3089	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3090	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3091	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q3101	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3102	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3103	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3104	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3110	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3111	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3112	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3201	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3202	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3203	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3204	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3205	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3206	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3207	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3208	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
Q3209	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3210	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3211	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q3213	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3214	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3215	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3216	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3217	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3301	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3302	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3303	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3304	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3305	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3401	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3402	8-729-028-28	TRANSISTOR 2SK2036(TE85L)			
Q3403	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3404	8-729-028-28	TRANSISTOR 2SK2036(TE85L)			
Q3405	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3406	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3407	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3408	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3409	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3410	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3411	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3412	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3413	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3414	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3415	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3603	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3604	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3605	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3606	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3609	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3610	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3611	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3612	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3613	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3617	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3618	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3619	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3620	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	RESISTOR				
R3001	1-216-805-11	RES-CHIP	47	5%	1/16W
R3002	1-216-805-11	RES-CHIP	47	5%	1/16W
R3003	1-216-842-11	RES-CHIP	56K	5%	1/16W
R3004	1-216-818-11	RES-CHIP	560	5%	1/16W
R3005	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3006	1-216-817-11	RES-CHIP	470	5%	1/16W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3007	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3009	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R3010	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R3011	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3012	1-216-864-11	SHORT			
R3013	1-216-813-11	RES-CHIP	220	5%	1/16W
R3014	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R3015	1-216-864-11	SHORT			
R3017	1-216-809-11	RES-CHIP	100	5%	1/16W
R3018	1-216-817-11	RES-CHIP	470	5%	1/16W
R3019	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3020	1-216-809-11	RES-CHIP	100	5%	1/16W
R3021	1-216-809-11	RES-CHIP	100	5%	1/16W
R3022	1-216-809-11	RES-CHIP	100	5%	1/16W
R3023	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3024	1-216-809-11	RES-CHIP	100	5%	1/16W
R3025	1-216-809-11	RES-CHIP	100	5%	1/16W
R3026	1-216-035-00	RES-CHIP	270	5%	1/10W
R3027	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3028	1-218-688-11	METAL CHIP	680	0.50%	1/16W
R3029	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R3030	1-216-864-11	SHORT			
R3035	1-216-809-11	RES-CHIP	100	5%	1/16W
R3036	1-216-809-11	RES-CHIP	100	5%	1/16W
R3037	1-216-809-11	RES-CHIP	100	5%	1/16W
R3038	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3039	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3040	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3042	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3043	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3044	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3045	1-216-817-11	RES-CHIP	470	5%	1/16W
R3046	1-216-817-11	RES-CHIP	470	5%	1/16W
R3047	1-216-809-11	RES-CHIP	100	5%	1/16W
R3048	1-216-809-11	RES-CHIP	100	5%	1/16W
R3049	1-216-809-11	RES-CHIP	100	5%	1/16W
R3050	1-216-809-11	RES-CHIP	100	5%	1/16W
R3051	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3052	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3053	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3056	1-216-817-11	RES-CHIP	470	5%	1/16W
R3057	1-216-817-11	RES-CHIP	470	5%	1/16W
R3058	1-216-835-11	RES-CHIP	15K	5%	1/16W
R3059	1-216-817-11	RES-CHIP	470	5%	1/16W
R3060	1-216-809-11	RES-CHIP	100	5%	1/16W
R3061	1-216-829-11	RES-CHIP	4.7K	5%	1/16W
R3062	1-218-697-11	METAL CHIP	1.6K	0.50%	1/16W
R3063	1-218-716-11	METAL CHIP	10K	0.50%	1/16W

B

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3064	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W
R3066	1-216-809-11	RES-CHIP	100	5%	1/16W
R3067	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3068	1-216-809-11	RES-CHIP	100	5%	1/16W
R3071	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3072	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3073	1-216-805-11	RES-CHIP	47	5%	1/16W
R3074	1-216-805-11	RES-CHIP	47	5%	1/16W
R3075	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3076	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3077	1-216-809-11	RES-CHIP	100	5%	1/16W
R3078	1-216-832-11	RES-CHIP	8.2K	5%	1/16W
R3079	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3080	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3081	1-216-809-11	RES-CHIP	100	5%	1/16W
R3082	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3083	1-216-864-11	SHORT			
R3084	1-216-864-11	SHORT			
R3085	1-216-864-11	SHORT			
R3086	1-216-864-11	SHORT			
R3087	1-216-864-11	SHORT			
R3088	1-216-864-11	SHORT			
R3089	1-216-864-11	SHORT			
R3090	1-216-861-11	RES-CHIP	2.2M	5%	1/16W
R3091	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3092	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3093	1-216-809-11	RES-CHIP	100	5%	1/16W
R3094	1-216-809-11	RES-CHIP	100	5%	1/16W
R3095	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3096	1-216-817-11	RES-CHIP	470	5%	1/16W
R3097	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3098	1-216-805-11	RES-CHIP	47	5%	1/16W
R3099	1-216-805-11	RES-CHIP	47	5%	1/16W
R3100	1-216-809-11	RES-CHIP	100	5%	1/16W
R3101	1-216-809-11	RES-CHIP	100	5%	1/16W
R3102	1-216-809-11	RES-CHIP	100	5%	1/16W
R3103	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3104	1-216-809-11	RES-CHIP	100	5%	1/16W
R3105	1-216-809-11	RES-CHIP	100	5%	1/16W
R3106	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3107	1-216-864-11	SHORT			
R3108	1-216-817-11	RES-CHIP	470	5%	1/16W
R3121	1-216-809-11	RES-CHIP	100	5%	1/16W
R3122	1-216-809-11	RES-CHIP	100	5%	1/16W
R3123	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W
R3124	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W
R3125	1-216-823-11	RES-CHIP	1.5K	5%	1/16W
R3126	1-216-823-11	RES-CHIP	1.5K	5%	1/16W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3127	1-216-829-11	RES-CHIP	4.7K	5%	1/16W
R3128	1-216-829-11	RES-CHIP	4.7K	5%	1/16W
R3129	1-216-835-11	RES-CHIP	15K	5%	1/16W
R3130	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3131	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3132	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3133	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3134	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3135	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3136	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3137	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3138	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3139	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3140	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3141	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3142	1-216-805-11	RES-CHIP	47	5%	1/16W
R3143	1-216-805-11	RES-CHIP	47	5%	1/16W
R3144	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3145	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3146	1-216-832-11	RES-CHIP	8.2K	5%	1/16W
R3147	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3151	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3152	1-216-818-11	RES-CHIP	560	5%	1/16W
R3154	1-216-832-11	RES-CHIP	8.2K	5%	1/16W
R3155	1-216-841-11	RES-CHIP	47K	5%	1/16W
R3156	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3157	1-216-817-11	RES-CHIP	470	5%	1/16W
R3158	1-216-817-11	RES-CHIP	470	5%	1/16W
R3159	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3160	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3161	1-216-809-11	RES-CHIP	100	5%	1/16W
R3162	1-216-815-11	RES-CHIP	330	5%	1/16W
R3163	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R3164	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R3165	1-216-861-11	RES-CHIP	2.2M	5%	1/16W
R3166	1-216-861-11	RES-CHIP	2.2M	5%	1/16W
R3180	1-218-673-11	METAL CHIP	160	0.50%	1/16W
R3181	1-218-673-11	METAL CHIP	160	0.50%	1/16W
R3182	1-218-673-11	METAL CHIP	160	0.50%	1/16W
R3183	1-216-809-11	RES-CHIP	100	5%	1/16W
R3184	1-216-809-11	RES-CHIP	100	5%	1/16W
R3185	1-216-809-11	RES-CHIP	100	5%	1/16W
R3186	1-218-674-11	METAL CHIP	180	0.50%	1/16W
R3187	1-218-674-11	METAL CHIP	180	0.50%	1/16W
R3188	1-218-674-11	METAL CHIP	180	0.50%	1/16W
R3190	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3191	1-218-694-11	METAL CHIP	1.2K	0.50%	1/16W
R3192	1-216-814-11	RES-CHIP	270	5%	1/16W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3193	1-218-698-11	METAL CHIP	1.8K	0.50%	1/16W
R3194	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3195	1-216-816-11	RES-CHIP	390	5%	1/16W
R3196	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3197	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3198	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3201	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3202	1-216-809-11	RES-CHIP	100	5%	1/16W
R3203	1-216-809-11	RES-CHIP	100	5%	1/16W
R3204	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3205	1-216-809-11	RES-CHIP	100	5%	1/16W
R3207	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3208	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3209	1-216-809-11	RES-CHIP	100	5%	1/16W
R3210	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3211	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3212	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3213	1-216-809-11	RES-CHIP	100	5%	1/16W
R3215	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3216	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3217	1-216-809-11	RES-CHIP	100	5%	1/16W
R3218	1-216-809-11	RES-CHIP	100	5%	1/16W
R3219	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3220	1-216-809-11	RES-CHIP	100	5%	1/16W
R3221	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3222	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3223	1-216-809-11	RES-CHIP	100	5%	1/16W
R3224	1-216-815-11	RES-CHIP	330	5%	1/16W
R3226	1-216-809-11	RES-CHIP	100	5%	1/16W
R3227	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3228	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3229	1-216-809-11	RES-CHIP	100	5%	1/16W
R3230	1-216-809-11	RES-CHIP	100	5%	1/16W
R3231	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3232	1-216-809-11	RES-CHIP	100	5%	1/16W
R3233	1-216-809-11	RES-CHIP	100	5%	1/16W
R3234	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3235	1-216-809-11	RES-CHIP	100	5%	1/16W
R3236	1-216-809-11	RES-CHIP	100	5%	1/16W
R3240	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3241	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3242	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3244	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3246	1-216-809-11	RES-CHIP	100	5%	1/16W
R3247	1-216-809-11	RES-CHIP	100	5%	1/16W
R3248	1-216-809-11	RES-CHIP	100	5%	1/16W
R3249	1-216-809-11	RES-CHIP	100	5%	1/16W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3250	1-216-809-11	RES-CHIP	100	5%	1/16W
R3254	1-216-809-11	RES-CHIP	100	5%	1/16W
R3255	1-216-809-11	RES-CHIP	100	5%	1/16W
R3256	1-216-809-11	RES-CHIP	100	5%	1/16W
R3257	1-216-809-11	RES-CHIP	100	5%	1/16W
R3258	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3259	1-216-853-11	RES-CHIP	470K	5%	1/16W
R3260	1-216-853-11	RES-CHIP	470K	5%	1/16W
R3261	1-216-827-11	RES-CHIP	3.3K	5%	1/16W
R3262	1-216-827-11	RES-CHIP	3.3K	5%	1/16W
R3263	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3264	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3265	1-216-857-11	RES-CHIP	1M	5%	1/16W
R3266	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3267	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3268	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3269	1-216-809-11	RES-CHIP	100	5%	1/16W
R3270	1-249-382-11	CARBON	1.2	5%	1/4W
R3272	1-216-841-11	RES-CHIP	47K	5%	1/16W
R3273	1-216-819-11	RES-CHIP	680	5%	1/16W
R3275	1-216-819-11	RES-CHIP	680	5%	1/16W
R3276	1-216-819-11	RES-CHIP	680	5%	1/16W
R3277	1-216-819-11	RES-CHIP	680	5%	1/16W
R3279	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3280	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3281	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3282	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3284	1-216-864-11	SHORT			
R3285	1-216-817-11	RES-CHIP	470	5%	1/16W
R3286	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R3287	1-216-817-11	RES-CHIP	470	5%	1/16W
R3288	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3289	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3290	1-216-809-11	RES-CHIP	100	5%	1/16W
R3291	1-216-842-11	RES-CHIP	56K	5%	1/16W
R3292	1-216-857-11	RES-CHIP	1M	5%	1/16W
R3293	1-216-803-11	RES-CHIP	33	5%	1/16W
R3294	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3296	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3297	1-216-841-11	RES-CHIP	47K	5%	1/16W
R3298	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3299	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3300	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3301	1-216-809-11	RES-CHIP	100	5%	1/16W
R3302	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3303	1-218-712-11	METAL CHIP	6.8K	0.50%	1/16W
R3304	1-218-692-11	METAL CHIP	1K	0.50%	1/16W

B

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3305	1-216-809-11	RES-CHIP	100	5%	1/16W
R3306	1-216-809-11	RES-CHIP	100	5%	1/16W
R3307	1-216-864-11	SHORT			
R3308	1-216-864-11	SHORT			
R3309	1-211-987-11	METAL CHIP	56	0.50%	1/16W
R3310	1-211-987-11	METAL CHIP	56	0.50%	1/16W
R3311	1-211-987-11	METAL CHIP	56	0.50%	1/16W
R3312	1-211-987-11	METAL CHIP	56	0.50%	1/16W
R3313	1-216-835-11	RES-CHIP	15K	5%	1/16W
R3314	1-211-990-11	METAL CHIP	75	0.50%	1/16W
R3315	1-216-835-11	RES-CHIP	15K	5%	1/16W
R3316	1-211-989-11	METAL CHIP	68	0.50%	1/16W
R3317	1-211-989-11	METAL CHIP	68	0.50%	1/16W
R3318	1-211-990-11	METAL CHIP	75	0.50%	1/16W
R3319	1-211-987-11	METAL CHIP	56	0.50%	1/16W
R3320	1-211-987-11	METAL CHIP	56	0.50%	1/16W
R3321	1-211-987-11	METAL CHIP	56	0.50%	1/16W
R3322	1-211-987-11	METAL CHIP	56	0.50%	1/16W
R3323	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3324	1-216-827-11	RES-CHIP	3.3K	5%	1/16W
R3325	1-216-827-11	RES-CHIP	3.3K	5%	1/16W
R3326	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3327	1-216-835-11	RES-CHIP	15K	5%	1/16W
R3328	1-216-864-11	SHORT			
R3329	1-216-815-11	RES-CHIP	330	5%	1/16W
R3330	1-216-815-11	RES-CHIP	330	5%	1/16W
R3331	1-216-841-11	RES-CHIP	47K	5%	1/16W
R3332	1-218-272-11	RES-CHIP	5.1K	5%	1/16W
R3333	1-216-864-11	SHORT			
R3334	1-216-809-11	RES-CHIP	100	5%	1/16W
R3335	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3337	1-216-820-11	RES-CHIP	820	5%	1/16W
R3338	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3339	1-216-855-11	RES-CHIP	680K	5%	1/16W
R3340	1-216-855-11	RES-CHIP	680K	5%	1/16W
R3341	1-216-813-11	RES-CHIP	220	5%	1/16W
R3342	1-220-158-11	RES-CHIP	3.6K	5%	1/16W
R3343	1-216-809-11	RES-CHIP	100	5%	1/16W
R3344	1-216-853-11	RES-CHIP	470K	5%	1/16W
R3345	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R3346	1-216-809-11	RES-CHIP	100	5%	1/16W
R3347	1-216-815-11	RES-CHIP	330	5%	1/16W
R3348	1-216-864-11	SHORT			
R3349	1-218-687-11	METAL CHIP	620	0.50%	1/16W
R3350	1-216-814-11	RES-CHIP	270	5%	1/16W
R3351	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3352	1-216-853-11	RES-CHIP	470K	5%	1/16W
R3353	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3354	1-216-813-11	RES-CHIP	220	5%	1/16W
R3355	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3356	1-216-864-11	SHORT			
R3357	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R3358	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R3359	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R3360	1-216-827-11	RES-CHIP	3.3K	5%	1/16W
R3361	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3364	1-216-864-11	SHORT			
R3366	1-216-864-11	SHORT			
R3367	1-216-803-11	RES-CHIP	33	5%	1/16W
R3369	1-216-864-11	SHORT			
R3371	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R3372	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R3373	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R3382	1-216-864-11	SHORT			
R3401	1-218-694-11	METAL CHIP	1.2K	0.50%	1/16W
R3403	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R3404	1-216-864-11	SHORT			
R3405	1-216-864-11	SHORT			
R3410	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3421	1-216-295-91	SHORT			
R3422	1-216-295-91	SHORT			
R3423	1-216-813-11	RES-CHIP	220	5%	1/16W
R3429	1-216-823-11	RES-CHIP	1.5K	5%	1/16W
R3432	1-216-815-11	RES-CHIP	330	5%	1/16W
R3434	1-216-809-11	RES-CHIP	100	5%	1/16W
R3445	1-216-864-11	SHORT			
R3446	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3447	1-216-819-11	RES-CHIP	680	5%	1/16W
R3448	1-216-855-11	RES-CHIP	680K	5%	1/16W
R3452	1-216-295-91	SHORT			
R3454	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3460	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3461	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3464	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3465	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3467	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3470	1-216-809-11	RES-CHIP	100	5%	1/16W
R3471	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3472	1-216-801-11	RES-CHIP	22	5%	1/16W
R3475	1-216-809-11	RES-CHIP	100	5%	1/16W
R3476	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3477	1-218-701-11	METAL CHIP	2.4K	0.50%	1/16W
R3478	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3483	1-218-701-11	METAL CHIP	2.4K	0.50%	1/16W
R3484	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3485	1-216-821-11	RES-CHIP	1K	5%	1/16W

B

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3486	1-216-801-11	RES-CHIP	22	5%	1/16W
R3489	1-216-864-11	SHORT			
R3490	1-216-864-11	SHORT			
R3491	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3492	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3493	1-218-701-11	METAL CHIP	2.4K	0.50%	1/16W
R3495	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3496	1-216-801-11	RES-CHIP	22	5%	1/16W
R3497	1-216-829-11	RES-CHIP	4.7K	5%	1/16W
R3498	1-216-818-11	RES-CHIP	560	5%	1/16W
R3499	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3602	1-216-809-11	RES-CHIP	100	5%	1/16W
R3606	1-216-864-11	SHORT			
R3609	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3610	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3611	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3612	1-216-857-11	RES-CHIP	1M	5%	1/16W
R3613	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3614	1-216-813-11	RES-CHIP	220	5%	1/16W
R3615	1-216-809-11	RES-CHIP	100	5%	1/16W
R3616	1-216-805-11	RES-CHIP	47	5%	1/16W
R3617	1-216-805-11	RES-CHIP	47	5%	1/16W
R3618	1-216-817-11	RES-CHIP	470	5%	1/16W
R3619	1-216-809-11	RES-CHIP	100	5%	1/16W
R3620	1-216-813-11	RES-CHIP	220	5%	1/16W
R3621	1-216-813-11	RES-CHIP	220	5%	1/16W
R3622	1-216-813-11	RES-CHIP	220	5%	1/16W
R3623	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3624	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3625	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3626	1-216-815-11	RES-CHIP	330	5%	1/16W
R3627	1-216-815-11	RES-CHIP	330	5%	1/16W
R3628	1-216-815-11	RES-CHIP	330	5%	1/16W
R3630	1-216-809-11	RES-CHIP	100	5%	1/16W
R3639	1-216-864-11	SHORT			
R3640	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3641	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3642	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3644	1-216-857-11	RES-CHIP	1M	5%	1/16W
R3645	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3646	1-216-813-11	RES-CHIP	220	5%	1/16W
R3647	1-216-809-11	RES-CHIP	100	5%	1/16W
R3648	1-216-805-11	RES-CHIP	47	5%	1/16W
R3649	1-216-805-11	RES-CHIP	47	5%	1/16W
R3650	1-216-817-11	RES-CHIP	470	5%	1/16W
R3651	1-216-809-11	RES-CHIP	100	5%	1/16W
R3652	1-216-813-11	RES-CHIP	220	5%	1/16W
R3653	1-216-813-11	RES-CHIP	220	5%	1/16W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3654	1-216-813-11	RES-CHIP	220	5%	1/16W
R3655	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3656	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3657	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3658	1-216-815-11	RES-CHIP	330	5%	1/16W
R3659	1-216-815-11	RES-CHIP	330	5%	1/16W
R3660	1-216-815-11	RES-CHIP	330	5%	1/16W
R3661	1-216-809-11	RES-CHIP	100	5%	1/16W
R3662	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3663	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3664	1-216-841-11	RES-CHIP	47K	5%	1/16W
R3665	1-216-817-11	RES-CHIP	470	5%	1/16W
R3666	1-216-809-11	RES-CHIP	100	5%	1/16W
R3667	1-216-839-11	RES-CHIP	33K	5%	1/16W
R3668	1-216-797-11	RES-CHIP	10	5%	1/16W
R3669	1-216-809-11	RES-CHIP	100	5%	1/16W
R3672	1-216-864-11	SHORT			
R3673	1-216-809-11	RES-CHIP	100	5%	1/16W
R3674	1-216-813-11	RES-CHIP	220	5%	1/16W
R3675	1-216-813-11	RES-CHIP	220	5%	1/16W
R3676	1-216-809-11	RES-CHIP	100	5%	1/16W
R3677	1-216-809-11	RES-CHIP	100	5%	1/16W
R3678	1-216-809-11	RES-CHIP	100	5%	1/16W
R3679	1-216-809-11	RES-CHIP	100	5%	1/16W
R3680	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3681	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3682	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3683	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3684	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3685	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3686	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3687	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3688	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3689	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3690	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3691	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3692	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3693	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3694	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3695	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3696	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3697	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3698	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3699	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3800	1-216-864-11	SHORT			
R3802	1-208-762-11	METAL CHIP	150	0.50%	1/10W
R3803	1-208-762-11	METAL CHIP	150	0.50%	1/10W
R3804	1-208-762-11	METAL CHIP	150	0.50%	1/10W

B

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3805	1-208-762-11	METAL CHIP	150	0.50%	1/10W
R3806	1-218-662-11	METAL CHIP	56	0.50%	1/16W
R3807	1-208-754-11	METAL CHIP	68	0.50%	1/10W
R3808	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3809	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3810	1-208-758-11	METAL CHIP	100	0.50%	1/10W
R3811	1-216-809-11	RES-CHIP	100	5%	1/16W
R3812	1-216-809-11	RES-CHIP	100	5%	1/16W
R3813	1-216-809-11	RES-CHIP	100	5%	1/16W
R3814	1-211-969-11	METAL CHIP	10	0.50%	1/16W
R3815	1-211-973-11	METAL CHIP	15	0.50%	1/16W
R3816	1-211-977-11	METAL CHIP	22	0.50%	1/16W
R3817	1-211-977-11	METAL CHIP	22	0.50%	1/16W
R3820	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3821	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3822	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3823	1-216-826-11	RES-CHIP	2.7K	5%	1/16W
R3824	1-216-826-11	RES-CHIP	2.7K	5%	1/16W
R3825	1-216-826-11	RES-CHIP	2.7K	5%	1/16W
R3826	1-216-809-11	RES-CHIP	100	5%	1/16W
R3828	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3829	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3830	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3831	1-216-864-11	SHORT			
R3832	1-216-864-11	SHORT			
R3833	1-216-864-11	SHORT			
R3840	1-216-807-11	RES-CHIP	68	5%	1/16W
R3843	1-218-694-11	METAL CHIP	1.2K	0.50%	1/16W
R3844	1-218-712-11	METAL CHIP	6.8K	0.50%	1/16W
R3845	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R3846	1-216-801-11	RES-CHIP	22	5%	1/16W
R3847	1-216-801-11	RES-CHIP	22	5%	1/16W
R3848	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3849	1-218-675-11	METAL CHIP	200	0.50%	1/16W
R3850	1-218-675-11	METAL CHIP	200	0.50%	1/16W
R3851	1-216-809-11	RES-CHIP	100	5%	1/16W
R3852	1-218-675-11	METAL CHIP	200	0.50%	1/16W
R3854	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3857	1-216-809-11	RES-CHIP	100	5%	1/16W
R3858	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R3862	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3863	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R3864	1-216-827-11	RES-CHIP	3.3K	5%	1/16W
R3865	1-216-809-11	RES-CHIP	100	5%	1/16W
R3866	1-414-234-22	FERRITE	0μH		
R3867	1-414-234-22	FERRITE	0μH		
R3868	1-414-234-22	FERRITE	0μH		
R3869	1-218-719-11	METAL CHIP	13K	0.50%	1/16W
R3870	1-218-719-11	METAL CHIP	13K	0.50%	1/16W
R3871	1-218-719-11	METAL CHIP	13K	0.50%	1/16W
R3872	1-211-990-11	METAL CHIP	75	0.50%	1/16W
R3873	1-211-990-11	METAL CHIP	75	0.50%	1/16W
R3874	1-211-990-11	METAL CHIP	75	0.50%	1/16W
R3876	1-208-762-11	METAL CHIP	150	0.50%	1/10W
R3901	1-216-035-00	RES-CHIP	270	5%	1/10W
R3902	1-216-035-00	RES-CHIP	270	5%	1/10W
R3903	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3904	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3905	1-216-809-11	RES-CHIP	100	5%	1/16W
R3906	1-216-809-11	RES-CHIP	100	5%	1/16W
R3907	1-216-809-11	RES-CHIP	100	5%	1/16W
R3908	1-216-809-11	RES-CHIP	100	5%	1/16W
R3909	1-216-809-11	RES-CHIP	100	5%	1/16W
R3910	1-216-809-11	RES-CHIP	100	5%	1/16W
R3914	1-216-864-11	SHORT			
R3915	1-211-969-11	METAL CHIP	10	0.50%	1/16W
R3916	1-211-969-11	METAL CHIP	10	0.50%	1/16W
R3917	1-211-969-11	METAL CHIP	10	0.50%	1/16W
R3924	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3925	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3926	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3933	1-216-864-11	SHORT			
R3937	1-216-809-11	RES-CHIP	100	5%	1/16W
R3940	1-216-864-11	SHORT			
R3942	1-216-864-11	SHORT			
R3943	1-216-864-11	SHORT			
R3945	1-216-864-11	SHORT			
R3946	1-216-864-11	SHORT			
R3953	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3954	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3955	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3956	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3957	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3958	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3959	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3960	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3961	1-208-755-11	METAL CHIP	75	0.50%	1/10W

RESISTOR BRIDGE

RB3301	1-234-525-21	RES, CHIP NETWORK	56
RB3302	1-234-525-21	RES, CHIP NETWORK	56
RB3303	1-234-525-21	RES, CHIP NETWORK	56
RB3304	1-234-525-21	RES, CHIP NETWORK	56
RB3305	1-234-525-21	RES, CHIP NETWORK	56
RB3306	1-234-525-21	RES, CHIP NETWORK	56
RB3307	1-234-525-21	RES, CHIP NETWORK	56

B A

REF. NO.	PART NO.	DESCRIPTION	VALUES		
RB3401	1-234-524-21	RES, CHIP NETWORK	33		
RB3402	1-234-524-21	RES, CHIP NETWORK	33		
RB3403	1-234-524-21	RES, CHIP NETWORK	33		
RB3404	1-234-524-21	RES, CHIP NETWORK	33		
RB3405	1-234-524-21	RES, CHIP NETWORK	33		
RB3406	1-234-524-21	RES, CHIP NETWORK	33		
RB3407	1-234-524-21	RES, CHIP NETWORK	33		
RB3408	1-234-524-21	RES, CHIP NETWORK	33		
RB3409	1-234-524-21	RES, CHIP NETWORK	33		
RB3410	1-234-524-21	RES, CHIP NETWORK	33		
RB3411	1-234-524-21	RES, CHIP NETWORK	33		
RB3412	1-234-524-21	RES, CHIP NETWORK	33		
RB3413	1-233-576-11	RES, CHIP NETWORK	100		
RB3414	1-233-576-11	RES, CHIP NETWORK	100		
RB3415	1-233-576-11	RES, CHIP NETWORK	100		
RB3416	1-233-576-11	RES, CHIP NETWORK	100		
RB3417	1-233-576-11	RES, CHIP NETWORK	100		
RB3418	1-233-576-11	RES, CHIP NETWORK	100		
RB3419	1-233-576-11	RES, CHIP NETWORK	100		
RB3420	1-233-576-11	RES, CHIP NETWORK	100		
RB3421	1-233-576-11	RES, CHIP NETWORK	100		
RB3422	1-233-576-11	RES, CHIP NETWORK	100		
RB3423	1-233-576-11	RES, CHIP NETWORK	100		
RB3424	1-233-576-11	RES, CHIP NETWORK	100		
RB3425	1-233-576-11	RES, CHIP NETWORK	100		

CRYSTAL

X3001	1-577-082-11	VIBRATOR, CERAMIC	
X3047	1-567-505-11	OSCILLATOR, CRYSTAL	
X3089	1-781-945-21	VIBRATOR, CERAMIC	
X3110	1-567-505-11	OSCILLATOR, CRYSTAL	
X3401	1-781-887-21	VIBRATOR, CRYSTAL	
X3601	1-767-179-31	VIBRATOR, CERAMIC	
X3602	1-767-179-31	VIBRATOR, CERAMIC	
X3603	1-767-989-11	VIBRATOR, CERAMIC	

A

*	**A-1299-481-A**	**A COMPLETE PC BOARD (KV-38DRC2 ONLY)**	
*	**A-1299-552-A**	**A COMPLETE PC BOARD (KV-38DRC2C ONLY)**	
*	4-374-846-11	COVER,CAPACITOR, CAP TYPE	
	4-382-854-01	SCREW (M3X8), P, SW (+)	

CAPACITOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C001	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C002	1-104-665-11	ELECT	100μF	20%	10V
C003	1-126-960-11	ELECT	1μF	20%	50V
C004	1-126-967-11	ELECT	47μF	20%	50V
C005	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C006	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C007	1-126-933-11	ELECT	100μF	20%	16V
C008	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C009	1-126-964-11	ELECT	10μF	20%	50V
C010	1-126-933-11	ELECT	100μF	20%	16V
C011	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C012	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C013	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C014	1-126-960-11	ELECT	1μF	20%	50V
C023	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C025	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C027	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C028	1-126-933-11	ELECT	100μF	20%	16V
C030	1-104-665-11	ELECT	100μF	20%	10V
C032	1-126-933-11	ELECT	100μF	20%	16V
C035	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C037	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C038	1-126-935-11	ELECT	470μF	20%	16V
C039	1-126-964-11	ELECT	10μF	20%	50V
C041	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C048	1-126-964-11	ELECT	10μF	20%	50V
C051	1-107-714-11	ELECT	10μF	20%	16V
C052	1-107-714-11	ELECT	10μF	20%	16V
C115	1-163-001-11	CERAMIC CHIP	220pF	10%	50V
C116	1-104-760-11	CERAMIC CHIP	0.047μF	10%	50V
C117	1-164-346-11	CERAMIC CHIP	1μF		16V
C119	1-163-001-11	CERAMIC CHIP	220pF	10%	50V
C120	1-104-760-11	CERAMIC CHIP	0.047μF	10%	50V
C121	1-164-346-11	CERAMIC CHIP	1μF		16V
C205	1-115-340-11	CERAMIC CHIP	0.22μF	10%	25V
C210	1-127-760-11	CERAMIC CHIP	4.7μF	10%	6.3V
C211	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C212	1-126-933-11	ELECT	100μF	20%	16V
C213	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C214	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C216	1-126-933-11	ELECT	100μF	20%	16V
C217	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V
C219	1-164-344-11	CERAMIC CHIP	0.068μF	10%	25V
C220	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V
C221	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C222	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C224	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C225	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C226	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C227	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
C229	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C230	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C232	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C233	1-164-492-11	CERAMIC CHIP	0.15µF	10%	16V
C234	1-125-838-11	CERAMIC CHIP	2.2µF	10%	6.3V
C235	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C236	1-126-964-11	ELECT	10µF	20%	50V
C237	1-126-933-11	ELECT	100µF	20%	16V
C238	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C239	1-126-964-11	ELECT	10µF	20%	50V
C240	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C241	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C242	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C243	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C244	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C245	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C246	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C247	1-126-933-11	ELECT	100µF	20%	16V
C248	1-127-760-11	CERAMIC CHIP	4.7µF	10%	6.3V
C249	1-126-967-11	ELECT	47µF	20%	50V
C250	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C251	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C252	1-126-933-11	ELECT	100µF	20%	16V
C253	1-163-009-91	CERAMIC CHIP	0.001µF	10%	50V
C254	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C255	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C256	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C257	1-127-760-11	CERAMIC CHIP	4.7µF	10%	6.3V
C258	1-164-346-11	CERAMIC CHIP	1µF		16V
C259	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C260	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C261	1-126-933-11	ELECT	100µF	20%	16V
C262	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C701	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C702	1-126-947-11	ELECT	47µF	20%	16V
C703	1-126-947-11	ELECT	47µF	20%	16V
C705	1-164-346-11	CERAMIC CHIP	1µF		16V
C708	1-164-346-11	CERAMIC CHIP	1µF		16V
C710	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C711	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V
C712	1-126-947-11	ELECT	47µF	20%	16V
C713	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C715	1-126-964-11	ELECT	10µF	20%	50V
C717	1-163-031-91	CERAMIC CHIP	0.01µF		50V
C718	1-163-235-11	CERAMIC CHIP	22pF	5%	50V
C719	1-163-235-11	CERAMIC CHIP	22pF	5%	50V
C720	1-126-935-11	ELECT	470µF	20%	16V
C721	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C722	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C724	1-126-961-11	ELECT	2.2µF	20%	50V
C731	1-163-009-91	CERAMIC CHIP	0.001µF	10%	50V
C732	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C733	1-163-031-91	CERAMIC CHIP	0.01µF		50V
C735	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C747	1-126-767-11	ELECT	1000µF	20%	16V
C748	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
⚠ C6002	1-136-346-21	MYLAR	0.22µF	20%	125V
C6003	1-117-227-11	MYLAR	1µF	10%	450V
C6004	1-126-961-11	ELECT	2.2µF	20%	50V
C6005	1-126-961-11	ELECT	2.2µF	20%	50V
C6006	1-126-967-11	ELECT	47µF	20%	50V
C6007	1-163-009-91	CERAMIC CHIP	0.001µF	10%	50V
C6008	1-126-968-11	ELECT	100µF	20%	50V
C6009	1-104-664-11	ELECT	47µF	20%	25V
C6011	1-126-968-11	ELECT	100µF	20%	50V
C6013	1-119-887-51	CERAMIC	1000pF	20%	250V
C6014	1-135-945-21	FILM	10000pF	3%	800V
C6015	1-130-495-00	MYLAR	0.1µF	5%	50V
C6017	1-125-969-91	CERAMIC	680pF	10%	1KV
C6018	1-126-929-11	ELECT	4700µF	20%	10V
C6019	1-128-546-11	ELECT	10000µF	20%	10V
C6020	1-126-936-11	ELECT	3300µF	20%	16V
C6021	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C6026	1-126-933-11	ELECT	100µF	20%	16V
C6027	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C6028	1-113-924-11	CERAMIC (KV-38DRC2C ONLY)	0.0047µF	20%	250V
⚠ C6029	1-136-311-11	MYLAR (KV-38DRC2 ONLY)	0.47µF	20%	125V
⚠ C6029	1-136-311-11	MYLAR (KV-38DRC2C ONLY)	0.47µF	20%	300V
C6030	1-126-935-11	ELECT	470µF	20%	16V
C6033	1-126-941-11	ELECT	470µF	20%	25V
C6045	1-126-926-11	ELECT	1000µF	20%	10V
C6048	1-126-767-11	ELECT	1000µF	20%	16V
C6057	1-126-916-11	ELECT	1000µF	20%	6.3V
C6059	1-126-971-11	ELECT	470µF	20%	50V
C6060	1-135-573-51	ELECT	15000µF	20%	25V
C6061	1-126-960-11	ELECT	1µF	20%	50V
C6062	1-126-947-11	ELECT	47µF	20%	25V
C6063	1-136-479-11	FILM	0.001µF	2%	50V
C6064	1-126-964-11	ELECT	10µF	20%	50V
C6065	1-126-933-11	ELECT	100µF	20%	16V
C7001	1-126-961-11	ELECT	2.2µF	20%	50V
C7006	1-126-767-11	ELECT	1000µF	20%	16V
C7007	1-136-169-00	FILM	0.22µF	5%	50V
C7008	1-126-767-11	ELECT	1000µF	20%	16V

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
C7009	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C7010	1-126-963-11	ELECT	4.7μF	20%	50V
C7011	1-126-959-11	ELECT	0.47μF	20%	50V
C7012	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C7013	1-164-182-11	CERAMIC CHIP	0.0033μF	10%	50V
C7014	1-163-989-11	CERAMIC CHIP	0.033μF	10%	25V
C7015	1-163-989-11	CERAMIC CHIP	0.033μF	10%	25V
C7016	1-126-959-11	ELECT	0.47μF	20%	50V
C7017	1-126-963-11	ELECT	4.7μF	20%	50V
C7018	1-136-169-00	FILM	0.22μF	5%	50V
C7019	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C7020	1-163-989-11	CERAMIC CHIP	0.033μF	10%	25V
C7021	1-164-182-11	CERAMIC CHIP	0.0033μF	10%	50V
C7022	1-163-989-11	CERAMIC CHIP	0.033μF	10%	25V
C7023	1-126-935-11	ELECT	470μF	20%	16V
C7024	1-126-935-11	ELECT	470μF	20%	16V
C7025	1-126-960-11	ELECT	1μF	20%	50V
C7026	1-126-960-11	ELECT	1μF	20%	50V
C7028	1-136-165-00	FILM	0.1μF	5%	50V
C7029	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V
C7030	1-126-953-11	ELECT	2200μF	20%	35V
C7032	1-163-038-91	CERAMIC CHIP	0.1μF		25V
C7033	1-126-934-11	ELECT	220μF	20%	16V
C7034	1-136-165-00	FILM	0.1μF	5%	50V
C7035	1-136-165-00	FILM	0.1μF	5%	50V
C7036	1-126-942-61	ELECT	1000μF	20%	25V
C7037	1-136-160-00	FILM	0.039μF	5%	50V
C7038	1-126-942-61	ELECT	1000μF	20%	25V
C7039	1-136-160-00	FILM	0.039μF	5%	50V
C7056	1-126-953-11	ELECT	2200μF	20%	35V
C7057	1-126-953-11	ELECT	2200μF	20%	35V
C7058	1-126-960-11	ELECT	1μF	20%	50V
C7059	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C7061	1-126-964-11	ELECT	10μF	20%	50V
C7062	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V
C7063	1-136-165-00	FILM	0.1μF	5%	50V
C7064	1-126-953-11	ELECT	2200μF	20%	35V
C7066	1-136-165-00	FILM	0.1μF	5%	50V
C7067	1-136-165-00	FILM	0.1μF	5%	50V
C7069	1-136-165-00	FILM	0.1μF	5%	50V
C7070	1-136-165-00	FILM	0.1μF	5%	50V
C7071	1-137-437-11	MYLAR	0.0056μF	5%	50V
C7072	1-137-437-11	MYLAR	0.0056μF	5%	50V
C7074	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C7075	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C7076	1-126-968-11	ELECT	100μF	20%	50V
C7077	1-126-960-11	ELECT	1μF	20%	50V
C7078	1-126-960-11	ELECT	1μF	20%	50V
C7084	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C7088	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C7089	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C7090	1-126-947-11	ELECT	47μF	20%	25V
C7094	1-126-960-11	ELECT	1μF	20%	50V
C7095	1-126-960-11	ELECT	1μF	20%	50V
C7096	1-126-960-11	ELECT	1μF	20%	50V
C7099	1-126-964-11	ELECT	10μF	20%	50V
C7101	1-126-935-11	ELECT	470μF	20%	16V
C7102	1-126-934-11	ELECT	220μF	20%	16V
C7103	1-163-038-91	CERAMIC CHIP	0.1μF		25V
C7105	1-126-935-11	ELECT	470μF	20%	16V
C7108	1-126-961-11	ELECT	2.2μF	20%	50V
C7109	1-126-961-11	ELECT	2.2μF	20%	50V
C7110	1-126-941-11	ELECT	470μF	20%	25V
C7151	1-126-967-11	ELECT	47μF	20%	50V
C7152	1-126-967-11	ELECT	47μF	20%	50V

CONNECTOR

	REF. NO.	PART NO.	DESCRIPTION
*	CN001	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P
*	CN003	1-785-304-11	CONNECTOR, DIN (RECEPTACLE) 64P
*	CN201	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P
*	CN202	1-764-333-11	PLUG,CONNECTOR 10P
*	CN203	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P
*	CN204	1-564-506-11	PLUG,CONNECTOR 3P
*	CN701	1-564-515-11	PLUG,CONNECTOR 12P
*	CN702	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P
*	CN703	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P
*	CN706	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P
*	CN707	1-564-507-11	PLUG,CONNECTOR 4P
*	CN6001	1-766-241-11	PIN,CONNECTOR (PC BOARD) 3P
*	CN6002	1-766-241-11	PIN,CONNECTOR (PC BOARD) 3P
*	CN6003	1-508-786-00	PIN,CONNECTOR (5MM PITCH) 2P
*	CN6005	1-766-176-11	PIN,CONNECTOR (PC BOARD) 6P
*	CN6006	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P
	CN6007	1-580-843-11	PIN,CONNECTOR (POWER)
*	CN6013	1-766-240-11	PIN,CONNECTOR (PC BOARD) 2P
*	CN7001	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P
*	CN7003	1-564-511-11	PLUG,CONNECTOR 8P
*	CN7008	1-564-511-61	PLUG,CONNECTOR 8P

DIODE

REF. NO.	PART NO.	DESCRIPTION
D004	8-719-977-28	DIODE UDZSTE-1710B
D008	8-719-977-28	DIODE UDZSTE-1710B
D203	8-719-025-31	DIODE 02CZ5.6-TE85L
D211	8-719-991-33	DIODE 1SS133T-77
D212	8-719-404-50	DIODE MA111-TX
D214	8-719-404-50	DIODE MA111-TX
D215	8-719-404-50	DIODE MA111-TX

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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REF. NO.	PART NO.	DESCRIPTION	VALUES
D701	8-719-914-43	DIODE DAN202K-T-146	
D703	8-719-914-43	DIODE DAN202K-T-146	
D705	8-719-404-50	DIODE MA111-TX	
D706	8-719-914-43	DIODE DAN202K-T-146	
D707	8-719-914-43	DIODE DAN202K-T-146	
D708	8-719-404-50	DIODE MA111-TX	
D709	8-719-991-33	DIODE 1SS133T-77	
D710	8-719-914-43	DIODE DAN202K-T-146	
D711	8-719-914-44	DIODE DAP202K-T-146	
D715	8-719-914-43	DIODE DAN202K-T-146	
D716	8-719-914-44	DIODE DAP202K-T-146	
D719	8-719-404-50	DIODE MA111-TX	
D720	8-719-404-50	DIODE MA111-TX	
D721	8-719-404-50	DIODE MA111-TX	
D722	8-719-404-50	DIODE MA111-TX	
D723	8-719-914-43	DIODE DAN202K-T-146	
D724	8-719-404-50	DIODE MA111-TX	
D725	8-719-404-50	DIODE MA111-TX	
D726	8-719-404-50	DIODE MA111-TX	
D727	8-719-404-50	DIODE MA111-TX	
D728	8-719-404-50	DIODE MA111-TX	
D6001	8-719-991-33	DIODE 1SS133T-77	
D6002	8-719-991-33	DIODE 1SS133T-77	
D6003	8-719-979-64	DIODE UF4005PKG23	
D6005	8-719-063-73	DIODE D1NL20U-TR	
D6009	8-719-063-73	DIODE D1NL20U-TR	
D6011	8-719-031-79	DIODE D5SC4M	
D6012	8-719-031-79	DIODE D5SC4M	
D6013	8-719-031-79	DIODE D5SC4M	
D6014	8-719-921-63	DIODE MTZJ-T-77-7.5B	
D6017	8-719-921-37	DIODE MTZJ-T-77-4.7	
D6018	8-719-991-33	DIODE 1SS133T-77	
D6020	8-719-511-40	DIODE S1VB20	
D6025	8-719-404-50	DIODE MA111-TX	
D7002	8-719-991-33	DIODE 1SS133T-77	
D7003	8-719-914-43	DIODE DAN202K-T-146	
D7004	8-719-914-44	DIODE DAP202K-T-146	
D7005	8-719-071-74	DIODE HZU11B1TRF	
D7009	8-719-404-50	DIODE MA111-TX	
D7010	8-719-404-50	DIODE MA111-TX	
D7011	8-719-404-50	DIODE MA111-TX	
D7012	8-719-404-50	DIODE MA111-TX	
D7013	8-719-041-97	DIODE MA113-(TX)	
D7014	8-719-924-13	DIODE MTZJ-T-77-22B	
D7015	8-719-924-13	DIODE MTZJ-T-77-22B	
D7016	8-719-041-97	DIODE MA113-(TX)	
D7017	8-719-041-97	DIODE MA113-(TX)	
D7103	8-719-404-50	DIODE MA111-TX	

REF. NO.	PART NO.	DESCRIPTION	VALUES
		FUSE	
⚠ F6001	1-532-506-51	FUSE 6.3A/250V	
		FERRITE BEAD	
FB6001	1-412-911-11	FERRITE	0μH
FB6003	1-412-911-11	FERRITE	0μH
FB6004	1-412-911-11	FERRITE	0μH
FB6005	1-412-911-11	FERRITE	0μH
FB6007	1-412-911-11	FERRITE	0μH
⚠ FB6012	1-412-911-11	FERRITE	0μH
⚠ FB6013	1-412-911-11	FERRITE (KV-38DRC2 ONLY)	0μH
FB6014	1-412-911-11	FERRITE (KV-38DRC2C ONLY)	0μH
		FUSE HOLDER	
FH6001	1-533-223-11	HOLDER, FUSE	
FH6002	1-533-223-11	HOLDER, FUSE	
		IC	
IC201	8-752-100-25	IC CXA2150AQ	
IC701	6-800-051-01	IC M306V2ME-153FP	
IC702	8-759-349-11	IC PST9145NL	
IC707	8-759-672-78	IC M24C08-BN6(A)	
⚠ IC6001	8-759-670-30	IC MCZ3001D	
IC6002	8-759-140-85	IC UPC1093J-T	
IC6003	8-759-520-49	IC PQ30RV21	
IC6007	8-759-513-71	IC PQ05RF21	
IC6010	8-759-653-07	IC PQ09RD21	
IC6011	8-759-450-47	IC BA05T	
IC7001	8-759-678-92	IC BH3868AFS-E2	
⚠ IC7002	8-759-246-70	IC TA8216H	
⚠ IC7005	8-759-246-70	IC TA8216H	
IC7006	8-759-331-71	IC NJM4558E(TE2)	
IC7007	8-759-331-71	IC NJM4558E(TE2)	
		COIL	
L001	1-469-320-21	INDUCTOR	100μH
L002	1-469-320-21	INDUCTOR	100μH
L003	1-469-317-21	INDUCTOR	10μH
L004	1-469-320-21	INDUCTOR	100μH
L005	1-469-320-21	INDUCTOR	100μH
L006	1-469-317-21	INDUCTOR	10μH
L201	1-469-317-21	INDUCTOR	10μH
L202	1-469-317-21	INDUCTOR	10μH
L203	1-469-317-21	INDUCTOR	10μH
L701	1-412-911-11	FERRITE	0μH
L702	1-412-911-11	FERRITE	0μH
L703	1-414-179-21	INDUCTOR	2.2μH
L6001	1-406-665-11	INDUCTOR	100μH
L6002	1-406-659-11	INDUCTOR	10μH

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REF. NO.	PART NO.	DESCRIPTION	VALUES
L6003	1-406-659-11	INDUCTOR	10μH
L6004	1-412-525-31	INDUCTOR	10μH
L6006	1-412-519-11	INDUCTOR	3.3μH
L6007	1-412-519-11	INDUCTOR	3.3μH
L6008	1-469-317-21	INDUCTOR	10μH
L7002	1-414-187-11	INDUCTOR	47μH
	PHOTO COUPLER		
PH6001	8-749-924-35	PHOTO COUPLER ON3171-R	
	TRANSISTOR		
Q001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q002	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q004	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q012	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q015	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q027	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q203	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q204	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q207	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q208	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q209	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q211	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q212	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q214	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q216	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q217	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q701	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q702	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q703	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q704	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q705	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q706	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q707	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q709	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q710	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q712	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q717	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q721	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q723	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q724	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q726	8-729-901-47	TRANSISTOR DTA143EKA-T146	
Q727	8-729-901-47	TRANSISTOR DTA143EKA-T146	
Q728	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q729	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q730	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q731	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q6001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	

REF. NO.	PART NO.	DESCRIPTION	VALUES		
Q6002	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q6007	8-729-052-29	TRANSISTOR 2SK2876-01MR-F122			
Q6008	8-729-052-29	TRANSISTOR 2SK2876-01MR-F122			
Q6009	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q6010	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q7001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q7004	8-729-900-53	TRANSISTOR DTC114EKA-T146			
Q7005	8-729-900-53	TRANSISTOR DTC114EKA-T146			
Q7009	8-729-900-53	TRANSISTOR DTC114EKA-T146			
Q7010	8-729-900-53	TRANSISTOR DTC114EKA-T146			
Q7013	8-729-900-53	TRANSISTOR DTC114EKA-T146			
Q7014	8-729-900-53	TRANSISTOR DTC114EKA-T146			
Q7015	8-729-900-53	TRANSISTOR DTC114EKA-T146			
Q7016	8-729-900-53	TRANSISTOR DTC114EKA-T146			
	RESISTOR				
R004	1-216-049-11	RES-CHIP	1K	5%	1/10W
R005	1-216-049-11	RES-CHIP	1K	5%	1/10W
R006	1-216-295-91	SHORT			
R007	1-216-017-91	RES-CHIP	47	5%	1/10W
R008	1-216-073-91	RES-CHIP	10K	5%	1/10W
R009	1-216-017-91	RES-CHIP	47	5%	1/10W
R010	1-216-073-91	RES-CHIP	10K	5%	1/10W
R011	1-216-113-00	RES-CHIP	470K	5%	1/10W
R012	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R013	1-216-081-00	RES-CHIP	22K	5%	1/10W
R014	1-216-085-91	RES-CHIP	33K	5%	1/10W
R015	1-208-776-11	METAL CHIP	560	0.50%	1/10W
R016	1-216-025-11	RES-CHIP	100	5%	1/10W
R017	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R037	1-216-295-91	SHORT			
R039	1-216-025-11	RES-CHIP	100	5%	1/10W
R042	1-216-025-11	RES-CHIP	100	5%	1/10W
R049	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R052	1-216-085-91	RES-CHIP	33K	5%	1/10W
R055	1-216-081-00	RES-CHIP	22K	5%	1/10W
R061	1-208-776-11	METAL CHIP	560	0.50%	1/10W
R065	1-216-025-11	RES-CHIP	100	5%	1/10W
R082	1-216-073-91	RES-CHIP	10K	5%	1/10W
R083	1-216-073-91	RES-CHIP	10K	5%	1/10W
R160	1-216-113-00	RES-CHIP	470K	5%	1/10W
R163	1-216-642-11	METAL CHIP	430	0.50%	1/10W
R164	1-216-041-00	RES-CHIP	470	5%	1/10W
R165	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R166	1-216-097-11	RES-CHIP	100K	5%	1/10W
R167	1-216-121-11	RES-CHIP	1M	5%	1/10W
R168	1-216-073-91	RES-CHIP	10K	5%	1/10W
R169	1-216-073-91	RES-CHIP	10K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R170	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R171	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R172	1-216-097-11	RES-CHIP	100K	5%	1/10W
R173	1-216-121-11	RES-CHIP	1M	5%	1/10W
R174	1-216-073-91	RES-CHIP	10K	5%	1/10W
R175	1-216-073-91	RES-CHIP	10K	5%	1/10W
R176	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R204	1-216-073-91	RES-CHIP	10K	5%	1/10W
R205	1-216-025-11	RES-CHIP	100	5%	1/10W
R206	1-208-752-11	METAL CHIP	56	0.50%	1/10W
R207	1-249-413-11	CARBON	470	5%	1/4W
R208	1-216-295-91	SHORT			
R210	1-216-025-11	RES-CHIP	100	5%	1/10W
R211	1-208-752-11	METAL CHIP	56	0.50%	1/10W
R215	1-249-413-11	CARBON	470	5%	1/4W
R219	1-216-025-11	RES-CHIP	100	5%	1/10W
R220	1-208-752-11	METAL CHIP	56	0.50%	1/10W
R221	1-249-413-11	CARBON	470	5%	1/4W
R223	1-216-025-11	RES-CHIP	100	5%	1/10W
R224	1-216-025-11	RES-CHIP	100	5%	1/10W
R226	1-216-073-91	RES-CHIP	10K	5%	1/10W
R228	1-216-025-11	RES-CHIP	100	5%	1/10W
R229	1-216-025-11	RES-CHIP	100	5%	1/10W
R230	1-216-025-11	RES-CHIP	100	5%	1/10W
R231	1-216-025-11	RES-CHIP	100	5%	1/10W
R232	1-216-025-11	RES-CHIP	100	5%	1/10W
R233	1-216-025-11	RES-CHIP	100	5%	1/10W
R234	1-216-025-11	RES-CHIP	100	5%	1/10W
R235	1-216-025-11	RES-CHIP	100	5%	1/10W
R236	1-216-025-11	RES-CHIP	100	5%	1/10W
R237	1-216-025-11	RES-CHIP	100	5%	1/10W
R238	1-216-025-11	RES-CHIP	100	5%	1/10W
R239	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R240	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R241	1-216-133-91	RES-CHIP	3.3M	5%	1/10W
R242	1-216-075-00	RES-CHIP	12K	5%	1/10W
R243	1-216-073-91	RES-CHIP	10K	5%	1/10W
R244	1-216-025-11	RES-CHIP	100	5%	1/10W
R245	1-216-073-91	RES-CHIP	10K	5%	1/10W
R246	1-216-073-91	RES-CHIP	10K	5%	1/10W
R247	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R248	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R249	1-216-025-11	RES-CHIP	100	5%	1/10W
R250	1-216-097-11	RES-CHIP	100K	5%	1/10W
R251	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R252	1-216-025-11	RES-CHIP	100	5%	1/10W
R253	1-216-043-91	RES-CHIP	560	5%	1/10W
R255	1-216-025-11	RES-CHIP	100	5%	1/10W
R256	1-216-041-00	RES-CHIP	470	5%	1/10W
R257	1-216-017-91	RES-CHIP	47	5%	1/10W
R258	1-216-017-91	RES-CHIP	47	5%	1/10W
R259	1-216-017-91	RES-CHIP	47	5%	1/10W
R260	1-216-037-00	RES-CHIP	330	5%	1/10W
R261	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R262	1-216-025-11	RES-CHIP	100	5%	1/10W
R263	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R264	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R265	1-216-073-91	RES-CHIP	10K	5%	1/10W
R266	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R267	1-216-073-91	RES-CHIP	10K	5%	1/10W
R274	1-216-025-11	RES-CHIP	100	5%	1/10W
R275	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R276	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R277	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R278	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R280	1-216-295-91	SHORT			
R281	1-216-295-91	SHORT			
R282	1-216-295-91	SHORT			
R283	1-216-295-91	SHORT			
R284	1-216-295-91	SHORT			
R701	1-216-089-91	RES-CHIP	47K	5%	1/10W
R702	1-216-097-11	RES-CHIP	100K	5%	1/10W
R703	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R704	1-216-073-91	RES-CHIP	10K	5%	1/10W
R705	1-216-101-00	RES-CHIP	150K	5%	1/10W
R706	1-216-073-91	RES-CHIP	10K	5%	1/10W
R707	1-216-097-11	RES-CHIP	100K	5%	1/10W
R708	1-216-025-11	RES-CHIP	100	5%	1/10W
R709	1-216-097-11	RES-CHIP	100K	5%	1/10W
R710	1-216-073-91	RES-CHIP	10K	5%	1/10W
R711	1-216-073-91	RES-CHIP	10K	5%	1/10W
R712	1-216-049-11	RES-CHIP	1K	5%	1/10W
R713	1-216-025-11	RES-CHIP	100	5%	1/10W
R714	1-216-025-11	RES-CHIP	100	5%	1/10W
R719	1-216-049-11	RES-CHIP	1K	5%	1/10W
R721	1-216-049-11	RES-CHIP	1K	5%	1/10W
R727	1-216-049-11	RES-CHIP	1K	5%	1/10W
R729	1-216-049-11	RES-CHIP	1K	5%	1/10W
R731	1-216-073-91	RES-CHIP	10K	5%	1/10W
R740	1-216-073-91	RES-CHIP	10K	5%	1/10W
R741	1-216-073-91	RES-CHIP	10K	5%	1/10W
R742	1-216-041-00	RES-CHIP	470	5%	1/10W
R743	1-216-025-11	RES-CHIP	100	5%	1/10W
R744	1-216-049-11	RES-CHIP	1K	5%	1/10W
R748	1-216-081-00	RES-CHIP	22K	5%	1/10W
R749	1-216-049-11	RES-CHIP	1K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R754	1-216-025-11	RES-CHIP	100	5%	1/10W
R755	1-216-025-11	RES-CHIP	100	5%	1/10W
R756	1-216-025-11	RES-CHIP	100	5%	1/10W
R757	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R758	1-216-025-11	RES-CHIP	100	5%	1/10W
R762	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R763	1-216-295-91	SHORT			
R764	1-216-049-11	RES-CHIP	1K	5%	1/10W
R767	1-216-049-11	RES-CHIP	1K	5%	1/10W
R769	1-216-049-11	RES-CHIP	1K	5%	1/10W
R771	1-216-049-11	RES-CHIP	1K	5%	1/10W
R772	1-216-081-00	RES-CHIP	22K	5%	1/10W
R773	1-216-081-00	RES-CHIP	22K	5%	1/10W
R774	1-216-081-00	RES-CHIP	22K	5%	1/10W
R776	1-216-049-11	RES-CHIP	1K	5%	1/10W
R777	1-216-073-91	RES-CHIP	10K	5%	1/10W
R780	1-216-073-91	RES-CHIP	10K	5%	1/10W
R781	1-216-025-11	RES-CHIP	100	5%	1/10W
R784	1-216-025-11	RES-CHIP	100	5%	1/10W
R785	1-216-049-11	RES-CHIP	1K	5%	1/10W
R787	1-216-121-11	RES-CHIP	1M	5%	1/10W
R788	1-216-295-91	SHORT			
R789	1-216-041-00	RES-CHIP	470	5%	1/10W
R791	1-216-025-11	RES-CHIP	100	5%	1/10W
R792	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R793	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R794	1-216-017-91	RES-CHIP	47	5%	1/10W
R795	1-216-025-11	RES-CHIP	100	5%	1/10W
R796	1-216-295-91	SHORT			
R797	1-216-017-91	RES-CHIP	47	5%	1/10W
R798	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R799	1-216-049-11	RES-CHIP	1K	5%	1/10W
R800	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R801	1-216-025-11	RES-CHIP	100	5%	1/10W
R802	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R803	1-216-017-91	RES-CHIP	47	5%	1/10W
R804	1-216-037-00	RES-CHIP	330	5%	1/10W
R805	1-216-037-00	RES-CHIP	330	5%	1/10W
R806	1-216-037-00	RES-CHIP	330	5%	1/10W
R807	1-216-017-91	RES-CHIP	47	5%	1/10W
R808	1-216-049-11	RES-CHIP	1K	5%	1/10W
R812	1-216-049-11	RES-CHIP	1K	5%	1/10W
R813	1-216-049-11	RES-CHIP	1K	5%	1/10W
R814	1-216-025-11	RES-CHIP	100	5%	1/10W
R815	1-216-025-11	RES-CHIP	100	5%	1/10W
R816	1-216-025-11	RES-CHIP	100	5%	1/10W
R817	1-216-025-11	RES-CHIP	100	5%	1/10W
R818	1-216-025-11	RES-CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R819	1-216-037-00	RES-CHIP	330	5%	1/10W
R822	1-216-037-00	RES-CHIP	330	5%	1/10W
R824	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R825	1-216-025-11	RES-CHIP	100	5%	1/10W
R827	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R828	1-216-073-91	RES-CHIP	10K	5%	1/10W
R829	1-216-073-91	RES-CHIP	10K	5%	1/10W
R830	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R834	1-216-041-00	RES-CHIP	470	5%	1/10W
R836	1-216-049-11	RES-CHIP	1K	5%	1/10W
R837	1-216-025-11	RES-CHIP	100	5%	1/10W
R838	1-216-049-11	RES-CHIP	1K	5%	1/10W
R839	1-216-025-11	RES-CHIP	100	5%	1/10W
R841	1-216-033-00	RES-CHIP	220	5%	1/10W
R842	1-216-081-00	RES-CHIP	22K	5%	1/10W
R843	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R847	1-216-025-11	RES-CHIP	100	5%	1/10W
R848	1-216-025-11	RES-CHIP	100	5%	1/10W
R849	1-216-295-91	SHORT			
R850	1-216-295-91	SHORT			
R851	1-216-295-91	SHORT			
R852	1-216-049-11	RES-CHIP	1K	5%	1/10W
R853	1-216-295-91	SHORT			
R854	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R856	1-216-049-11	RES-CHIP	1K	5%	1/10W
R857	1-216-025-11	RES-CHIP	100	5%	1/10W
R858	1-216-295-91	SHORT			
R859	1-216-295-91	SHORT			
R860	1-216-689-11	RES-CHIP	39K	5%	1/10W
R861	1-216-689-11	RES-CHIP	39K	5%	1/10W
R862	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R863	1-216-049-11	RES-CHIP	1K	5%	1/10W
R864	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R865	1-216-295-91	SHORT			
R866	1-216-295-91	SHORT			
R867	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6001	1-216-073-91	RES-CHIP	10K	5%	1/10W
⚠ R6002	1-249-393-11	CARBON	10	5%	1/4W
⚠ R6003	1-219-776-11	CARBON (KV-38DRC2 ONLY)	2.2M	10%	1/2W
⚠ R6003	1-247-289-00	CARBON (KV-38DRC2C ONLY)	8.2M	5%	1W
R6004	1-216-121-11	RES-CHIP	1M	5%	1/10W
⚠ R6006	1-220-926-11	FUSIBLE	0.47	10%	1/2W
R6007	1-215-481-00	METAL	330K	1%	1/4W
R6008	1-215-481-00	METAL	330K	1%	1/4W
R6009	1-215-481-00	METAL	330K	1%	1/4W
R6010	1-249-393-11	CARBON	10	5%	1/4W

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R6011	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
	R6012	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R6015	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R6019	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6020	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R6021	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
	R6022	1-208-803-11	METAL CHIP	7.5K	0.50%	1/10W
	R6025	1-249-417-11	CARBON	1K	5%	1/4W
	R6029	1-216-105-91	RES-CHIP	220K	5%	1/10W
	R6038	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
	R6039	1-208-812-11	METAL CHIP	18K	0.50%	1/10W
	R6040	1-208-840-11	METAL CHIP	270K	0.50%	1/10W
⚠	R6041	1-240-241-11	CEMENTED (KV-38DRC ONLY)	0.47	5%	20W
⚠	R6041	1-205-943-11	CEMENTED (KV-38DRC2 ONLY)	1	5%	20W
⚠	R6042	1-240-241-11	CEMENTED (KV-38DRC ONLY)	0.47	5%	20W
⚠	R6042	1-205-943-11	CEMENTED (KV-38DRC2 ONLY)	1	5%	20W
	R6043	1-211-964-11	METAL CHIP	33	0.50%	1/10W
	R6044	1-249-393-11	CARBON	10	5%	1/4W
	R6046	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6047	1-216-041-00	RES-CHIP	470	5%	1/10W
	R6049	1-216-363-00	METAL OXIDE	0.33	5%	2W
	R6050	1-216-363-00	METAL OXIDE	0.33	5%	2W
	R6051	1-249-393-11	CARBON	10	5%	1/4W
	R6052	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6053	1-215-907-11	METAL OXIDE	22	5%	3W
	R6055	1-216-033-00	RES-CHIP	220	5%	1/10W
	R6056	1-208-810-11	METAL CHIP	15K	0.50%	1/10W
	R6058	1-208-758-11	METAL CHIP	100	0.50%	1/10W
	R6059	1-249-417-11	CARBON	1K	5%	1/4W
	R6060	1-202-962-11	CEMENTED (KV-38DRC2C ONLY)	3.3	5%	10W
	R6061	1-202-962-11	CEMENTED (KV-38DRC2C ONLY)	3.3	5%	10W
	R6062	1-216-295-91	SHORT			
	R6063	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6064	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
	R6065	1-216-049-11	RES-CHIP	1K	5%	1/10W
⚠	R6066	1-216-343-00	METAL OXIDE	0.33	5%	1W
	R6067	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R6068	1-249-433-11	CARBON	22K	5%	1/4W
	R7002	1-216-097-11	RES-CHIP	100K	5%	1/10W
	R7003	1-216-689-11	RES-CHIP	39K	5%	1/10W
	R7004	1-216-689-11	RES-CHIP	39K	5%	1/10W
	R7005	1-216-121-11	RES-CHIP	1M	5%	1/10W
	R7006	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R7007	1-216-017-91	RES-CHIP	47	5%	1/10W
	R7008	1-216-085-91	RES-CHIP	33K	5%	1/10W
	R7009	1-216-295-91	SHORT			
	R7010	1-216-295-91	SHORT			
	R7011	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
	R7012	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
	R7013	1-216-077-91	RES-CHIP	15K	5%	1/10W
	R7014	1-249-429-11	CARBON	10K	5%	1/4W
	R7015	1-249-429-11	CARBON	10K	5%	1/4W
	R7016	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R7017	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R7018	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R7019	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R7021	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R7022	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R7023	1-249-385-11	CARBON	2.2	5%	1/4W
	R7024	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R7025	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R7026	1-249-385-11	CARBON	2.2	5%	1/4W
	R7045	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R7046	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
	R7047	1-216-041-00	RES-CHIP	470	5%	1/10W
	R7048	1-216-041-00	RES-CHIP	470	5%	1/10W
	R7051	1-216-295-91	SHORT			
	R7052	1-216-077-91	RES-CHIP	15K	5%	1/10W
	R7053	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R7054	1-216-295-91	SHORT			
	R7055	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
	R7056	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
	R7058	1-249-429-11	CARBON	10K	5%	1/4W
	R7059	1-249-385-11	CARBON	2.2	5%	1/4W
	R7060	1-249-385-11	CARBON	2.2	5%	1/4W
	R7061	1-216-295-91	SHORT			
	R7063	1-216-689-11	RES-CHIP	39K	5%	1/10W
	R7064	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R7065	1-216-041-00	RES-CHIP	470	5%	1/10W
	R7067	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R7068	1-216-041-00	RES-CHIP	470	5%	1/10W
	R7070	1-216-689-11	RES-CHIP	39K	5%	1/10W
	R7071	1-216-121-11	RES-CHIP	1M	5%	1/10W
	R7083	1-249-429-11	CARBON	10K	5%	1/4W
	R7086	1-216-295-91	SHORT			
	R7088	1-216-295-91	SHORT			
	R7090	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R7091	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R7092	1-216-025-11	RES-CHIP	100	5%	1/10W
	R7093	1-216-025-11	RES-CHIP	100	5%	1/10W
	R7094	1-216-081-00	RES-CHIP	22K	5%	1/10W

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R7095	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R7096	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
	R7097	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
	R7098	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
	R7099	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
	R7100	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R7101	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R7103	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R7104	1-216-295-91	SHORT			

RELAY

⚠	RY6001	1-755-389-11	RELAY (AC POWER)

TRANSFORMER

⚠	T6001	1-433-404-11	TRANSFORMER, LINE FILTER
⚠	T6002	1-435-675-11	TRANSFORMER, STANDBY (KV-38DRC2 ONLY)
⚠	T6002	1-435-676-11	TRANSFORMER, STANDBY (KV-38DRC2C ONLY
	T6003	1-435-577-11	TRANSFORMER, CONVERTER (PIT)

THERMISTOR

⚠	TH6002	1-803-970-11	THERMISTOR, POSITIVE (KV-38DRC2 ONLY)
⚠	TH6002	1-803-540-11	THERMISTOR (KV-38DRC2C ONLY)

TUNER

TU001	8-598-501-30	TUNER, FSS BTF-FA402
TU002	8-598-542-20	TUNER, FSS BTF-WA412

VARISTOR

⚠	VD6001	1-801-074-11	VARISTOR ERZV10D271 (KV-38DRC2 ONLY)
⚠	VD6001	1-803-587-11	VARISTOR ENE471D-14A (KV-38DRC2C ONLY)

CRYSTAL

X201	1-760-895-21	VIBRATOR, CERAMIC
X702	1-781-931-21	VIBRATOR, CRYSTAL

C

* **A-1332-075-A** **C MOUNTED PC BOARD**

7-682-647-09 SCREW TPS 3X6

CAPACITOR

C9001	1-126-940-11	ELECT	330µF	20%	25V
C9002	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9003	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9004	1-162-114-00	CERAMIC	0.0047µF		2KV
C9005	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9006	1-163-217-11	CERAMIC CHIP	1pF	0.25pF	50V
C9007	1-163-217-11	CERAMIC CHIP	1pF	0.25pF	50V
C9008	1-163-222-11	CERAMIC CHIP	5pF	0.25pF	50V
C9009	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9010	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9011	1-161-830-00	CERAMIC	0.0047µF		500V
C9012	1-161-830-00	CERAMIC	0.0047µF		500V
C9013	1-163-035-00	CERAMIC CHIP	0.047µF		50V
C9014	1-161-830-00	CERAMIC	0.0047µF		500V
C9015	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9018	1-107-961-91	ELECT	10µF	20%	250V
C9019	1-163-035-00	CERAMIC CHIP	0.047µF		50V
C9020	1-107-961-91	ELECT	10µF	20%	250V
C9021	1-107-961-91	ELECT	10µF	20%	250V
C9022	1-101-004-00	CERAMIC	0.01µF		50V
C9023	1-101-004-00	CERAMIC	0.01µF		50V
C9024	1-163-035-00	CERAMIC CHIP	0.047µF		50V
C9025	1-104-653-11	ELECT	220µF	20%	16V
C9026	1-163-035-00	CERAMIC CHIP	0.047µF		50V
C9027	1-101-004-00	CERAMIC	0.01µF		50V
C9028	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C9029	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C9030	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C9031	1-162-116-00	CERAMIC	680pF	10%	2KV
C9032	1-162-116-00	CERAMIC	680pF	10%	2KV
C9033	1-107-662-11	ELECT	22µF	20%	250V
C9035	1-126-933-11	ELECT	100µF	20%	16V
C9036	1-126-964-11	ELECT	10µF	20%	50V
C9037	1-126-961-11	ELECT	2.2µF	20%	50V
C9038	1-126-963-11	ELECT	4.7µF	20%	50V
C9042	1-126-940-11	ELECT	330µF	20%	25V
C9046	1-126-933-11	ELECT	100µF	20%	16V
C9047	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V

CONNECTOR

*	CN9001	1-764-333-11	PLUG,CONNECTOR 10P
*	CN9002	1-766-242-11	PIN,CONNECTOR (PC BOARD) 4P
	CN9003	1-695-915-11	TAB (CONTACT)
	CN9004	1-695-915-11	TAB (CONTACT)

DIODE

D9001	8-719-991-33	DIODE 1SS133T-77
D9002	8-719-400-75	DIODE MA3091-TX
D9003	8-719-991-33	DIODE 1SS133T-77
D9005	8-719-404-50	DIODE MA111-TX
D9006	8-719-051-85	DIODE HSS83TD
D9007	8-719-051-85	DIODE HSS83TD
D9008	8-719-051-85	DIODE HSS83TD

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

C

REF. NO.	PART NO.	DESCRIPTION	VALUES		
D9009	8-719-908-03	DIODE GP08DPKG23			
D9010	8-719-110-17	DIODE MTZJ-T-77-10			
D9013	8-719-991-33	DIODE 1SS133T-77			
D9014	8-719-991-33	DIODE 1SS133T-77			
D9015	8-719-991-33	DIODE 1SS133T-77			
D9016	8-719-991-33	DIODE 1SS133T-77			
D9017	8-719-991-33	DIODE 1SS133T-77			
	IC				
IC9001	8-759-360-83	IC TDA6111Q/N4			
IC9002	8-759-360-83	IC TDA6111Q/N4			
IC9003	8-759-360-83	IC TDA6111Q/N4			
	JACK				
⚠ J9001	1-451-470-21	SOCKET, CRT			
	COIL				
L9002	1-408-591-11	INDUCTOR	1μH		
L9003	1-408-591-11	INDUCTOR	1μH		
L9004	1-408-591-11	INDUCTOR	1μH		
L9005	1-406-666-21	INDUCTOR	150μH		
L9006	1-412-525-31	INDUCTOR	10μH		
	TRANSISTOR				
Q9001	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q9002	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q9003	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q9004	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q9005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q9008	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q9009	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q9010	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q9011	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q9012	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q9014	8-729-823-81	TRANSISTOR 2SC4632LS-CB7			
	RESISTOR				
R9001	1-216-077-91	RES-CHIP	15K	5%	1/10W
R9004	1-249-428-11	CARBON	8.2K	5%	1/4W
R9005	1-249-421-11	CARBON	2.2K	5%	1/4W
R9006	1-249-429-11	CARBON	10K	5%	1/4W
R9007	1-208-789-11	METAL CHIP	2K	0.50%	1/10W
R9008	1-216-085-91	RES-CHIP	33K	5%	1/10W
R9009	1-249-429-11	CARBON	10K	5%	1/4W
R9010	1-249-429-11	CARBON	10K	5%	1/4W
R9012	1-249-417-11	CARBON	1K	5%	1/4W
R9013	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9014	1-249-409-11	CARBON	220	5%	1/4W
R9015	1-249-409-11	CARBON	220	5%	1/4W
R9016	1-249-409-11	CARBON	220	5%	1/4W
R9018	1-216-065-91	RES-CHIP	4.7K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9019	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R9026	1-208-789-11	METAL CHIP	2K	0.50%	1/10W
R9031	1-208-789-11	METAL CHIP	2K	0.50%	1/10W
R9033	1-215-447-00	METAL	12K	1%	1/4W
R9034	1-215-439-00	METAL	5.6K	1%	1/4W
R9035	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W
R9036	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9037	1-240-233-71	METAL OXIDE	100	5%	3W
R9038	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W
R9039	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W
R9041	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9042	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9043	1-240-233-71	METAL OXIDE	100	5%	3W
R9044	1-240-233-71	METAL OXIDE	100	5%	3W
R9047	1-202-557-00	SOLID	220	20%	1/2W
R9048	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9049	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9050	1-249-424-11	CARBON	3.9K	5%	1/4W
R9051	1-202-557-00	SOLID	220	20%	1/2W
R9052	1-202-557-00	SOLID	220	20%	1/2W
R9053	1-249-424-11	CARBON	3.9K	5%	1/4W
R9054	1-249-424-11	CARBON	3.9K	5%	1/4W
R9055	1-260-126-81	CARBON	180K	5%	1/2W
R9056	1-202-549-00	SOLID	100	20%	1/2W
R9057	1-202-847-00	SOLID	560K	20%	1/2W
R9059	1-202-818-00	SOLID	1K	20%	1/2W
R9061	1-202-549-00	SOLID	100	20%	1/2W
R9062	1-260-123-11	CARBON	100K	5%	1/2W
R9063	1-260-123-11	CARBON	100K	5%	1/2W
R9064	1-260-126-81	CARBON	180K	5%	1/2W
R9065	1-249-425-11	CARBON	4.7K	5%	1/4W
R9067	1-219-769-11	CARBON	3.3M	5%	1/2W
R9068	1-216-101-00	RES-CHIP	150K	5%	1/10W
R9070	1-249-411-11	CARBON	330	5%	1/4W
R9071	1-249-411-11	CARBON	330	5%	1/4W
R9072	1-249-411-11	CARBON	330	5%	1/4W
R9073	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9076	1-219-769-11	CARBON	3.3M	5%	1/2W
R9077	1-249-417-11	CARBON	1K	5%	1/4W
R9078	1-249-427-11	CARBON	6.8K	5%	1/4W
R9079	1-249-426-11	CARBON	5.6K	5%	1/4W
R9081	1-247-843-11	CARBON	3.3K	5%	1/4W
R9083	1-249-436-11	CARBON	39K	5%	1/4W
R9084	1-260-126-81	CARBON	180K	5%	1/2W
R9085	1-260-126-81	CARBON	180K	5%	1/2W
R9089	1-215-445-00	METAL	10K	1%	1/4W
R9091	1-215-429-00	METAL	2.2K	1%	1/4W

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C D

REF. NO.	PART NO.	DESCRIPTION	VALUES		
		VARIABLE RESISTOR			
RV9001	1-241-714-11	RES, ADJ, METAL FILM	110M		
RV9002	1-241-788-11	RES, ADJ, CARBON	100K		

D

REF. NO.	PART NO.	DESCRIPTION	VALUES		
*	**A-1346-948-A**	**D COMPLETE PC BOARD (KV-38DRC2 ONLY)**			
*	**A-1346-956-A**	**D COMPLETE PC BOARD (KV-38DRC2C ONLY)**			

The high-voltage leads associated with the FBT on the D Board are not included and must be ordered separately. Order the following leads when requesting this D Board:

REF. NO.	PART NO.	DESCRIPTION	VALUES		
⚠	1-251-715-22	HV CAP ASSY			
⚠	1-900-805-19	FOCUS LEAD			
	3-710-578-01	COVER, VOLUME, 6 MOLD			
	4-382-854-01	SCREW (M3X8), P, SW (+)			
	4-382-854-21	SCREW (M3X14), P, SW (+)			
		CAPACITOR			
C5001	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C5002	1-106-383-00	MYLAR	0.047µF	10%	200V
C5004	1-106-383-00	MYLAR	0.047µF	10%	200V
C5005	1-126-235-11	ELECT	100µF	20%	6.3V
C5006	1-126-964-11	ELECT	10µF	20%	50V
C5007	1-126-941-11	ELECT	470µF	20%	25V
C5008	1-126-940-11	ELECT	330µF	20%	25V
C5009	1-126-941-11	ELECT	470µF	20%	25V
C5011	1-107-641-11	ELECT	220µF	20%	160V
C5012	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C5013	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C5015	1-107-884-11	ELECT	1000µF	20%	16V
C5016	1-136-171-00	FILM	0.33µF	5%	50V
C5017	1-115-185-11	CERAMIC CHIP	0.033µF	10%	50V
C5018	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5019	1-126-968-11	ELECT	100µF	20%	50V
C5020	1-126-767-11	ELECT	1000µF	20%	16V
C5021	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C5022	1-137-368-11	MYLAR	0.0047µF	5%	50V
C5023	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5024	1-102-038-00	CERAMIC	0.001µF		500V
C5025	1-130-471-00	MYLAR	0.001µF	5%	50V
C5026	1-107-655-11	ELECT	47µF	20%	250V
C5027	1-126-963-11	ELECT	4.7µF	20%	50V
C5028	1-126-963-11	ELECT	4.7µF	20%	50V
C5030	1-136-153-00	FILM	0.01µF	5%	50V
C5031	1-163-011-11	CERAMIC CHIP	0.0015µF	10%	50V
C5032	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C5033	1-136-165-00	FILM	0.1µF	5%	50V
C5034	1-162-114-00	CERAMIC	0.0047µF		2KV
C5035	1-126-933-11	ELECT	100µF	20%	16V
C5036	1-126-941-11	ELECT	470µF	20%	25V
C5037	1-107-670-11	ELECT	10µF	20%	400V
C5038	1-126-947-11	ELECT	47µF	20%	16V
C5040	1-126-935-11	ELECT	470µF	20%	16V
C5041	1-126-935-11	ELECT	470µF	20%	16V
C5043	1-126-767-11	ELECT	1000µF	20%	16V
C5044	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C5045	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C5046	1-163-025-11	CERAMIC CHIP	0.001µF		50V
C5047	1-163-025-11	CERAMIC CHIP	0.001µF		50V
C5049	1-163-009-91	CERAMIC CHIP	0.001µF	10%	50V
C5050	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5051	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C5052	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C5053	1-107-372-11	MYLAR	0.22µF	10%	200V
C5056	1-162-318-11	CERAMIC	0.001µF	10%	500V
C5057	1-162-134-11	CERAMIC	470pF	10%	2KV
C5058	1-162-116-00	CERAMIC	680pF	10%	2KV
C5059	1-162-116-00	CERAMIC	680pF	10%	2KV
C5060	1-137-417-11	MYLAR	0.0047µF	10%	200V
C5061	1-117-839-11	FILM	9100pF	3%	1.5KV
C5063	1-117-839-11	FILM	9100pF	3%	1.5KV
C5064	1-115-520-11	FILM	0.68µF	5%	250V
C5065	1-107-506-11	FILM	0.68µF	3%	400V
C5066	1-109-921-11	CERAMIC	0.0015µF	10%	500V
C5069	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C5070	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C5071	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C5072	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5073	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C5075	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C5076	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C5077	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C5079	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5080	1-137-372-11	MYLAR	0.022µF	5%	50V
C5081	1-137-372-11	MYLAR	0.022µF	5%	50V
C5102	1-107-888-11	ELECT	47µF	20%	25V
C5501	1-107-888-11	ELECT	47µF	20%	25V
C5502	1-126-941-11	ELECT	470µF	20%	25V
C5503	1-104-665-11	ELECT	100µF	20%	25V
C5504	1-126-947-11	ELECT	47µF	20%	16V
C5505	1-126-964-11	ELECT	10µF	20%	50V
C5506	1-126-963-11	ELECT	4.7µF	20%	50V
C5507	1-163-141-00	CERAMIC CHIP	0.001µF	5%	50V

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
C5508	1-163-031-91	CERAMIC CHIP	0.01µF		50V
C5509	1-163-263-11	CERAMIC CHIP	330pF	5%	50V
C5511	1-126-933-11	ELECT	100µF	20%	16V
C5514	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5518	1-129-709-61	FILM	0.0039µF	5%	630V
C5519	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C5522	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C5531	1-136-165-00	FILM	0.1µF	5%	50V
C5533	1-137-366-11	MYLAR	0.0022µF	5%	50V
C5542	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C5548	1-137-194-81	FILM	0.47µF	5%	50V
C5550	1-129-716-00	FILM	0.015µF	5%	200V
C5576	1-104-666-11	ELECT	220µF	20%	25V
C5577	1-104-666-11	ELECT	220µF	20%	25V
C5587	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C5588	1-136-153-00	FILM	0.01µF	5%	50V
C5590	1-163-263-11	CERAMIC CHIP	330pF	5%	50V
C5592	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C5594	1-136-165-00	FILM	0.1µF	5%	50V
C5596	1-126-960-11	ELECT	1µF	20%	50V
C5598	1-126-947-11	ELECT	47µF	20%	16V
C5600	1-126-947-11	ELECT	47µF	20%	16V
C5601	1-136-165-00	FILM	0.1µF	5%	50V
C5602	1-126-947-11	ELECT	47µF	20%	16V
C5603	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C5605	1-136-177-00	FILM	1µF	5%	50V
C5607	1-115-185-11	CERAMIC CHIP	0.033µF	10%	50V
C5609	1-104-665-11	ELECT	100µF	20%	25V
C5610	1-126-935-11	ELECT	470µF	20%	16V
C5611	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C5612	1-126-964-11	ELECT	10µF	20%	50V
C5613	1-115-185-11	CERAMIC CHIP	0.033µF	10%	50V
C5614	1-126-964-11	ELECT	10µF	20%	50V
C5616	1-136-165-00	FILM	0.1µF	5%	50V
C5617	1-126-947-11	ELECT	47µF	20%	16V
C5618	1-136-171-00	FILM	0.33µF	5%	50V
C5619	1-163-127-00	CERAMIC CHIP	270pF	5%	50V
C5621	1-136-165-00	FILM	0.1µF	5%	50V
C5623	1-126-933-11	ELECT	100µF	20%	16V
C5625	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C5628	1-126-933-11	ELECT	100µF	20%	16V
C6503	1-131-940-11	ELECT	1200µF	20%	250V
C6504	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C6507	1-126-967-11	ELECT	47µF	20%	50V
C6508	1-126-947-11	ELECT	47µF	20%	25V
C6510	1-130-495-00	MYLAR	0.1µF	5%	50V
C6511	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C6516	1-163-009-91	CERAMIC CHIP	0.001µF	10%	50V
C6517	1-126-963-11	ELECT	4.7µF	20%	50V
C6518	1-136-479-11	FILM	0.001µF	2%	50V
C6519	1-126-964-11	ELECT	10µF	20%	50V
C6525	1-164-143-11	CERAMIC	0.001µF	10%	1KV
C6526	1-164-143-11	CERAMIC	0.001µF	10%	1KV
C6532	1-135-998-21	FILM	56000pF	3%	800V
C6544	1-107-855-12	ELECT(BLOCK)	330µF		160V
C6545	1-126-943-11	ELECT	2200µF	20%	25V
C6546	1-128-548-11	ELECT	4700µF	20%	25V
C6547	1-113-610-11	ELECT(BLOCK)	220µF	20%	250V
C6548	1-128-549-11	ELECT	3300µF	20%	35V
C6551	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C6561	1-126-960-11	ELECT	1µF	20%	50V
⚠ C6584	1-136-344-11	MYLAR	0.047µF	20%	125V
⚠ C6585	1-119-899-51	CERAMIC	1000pF	10%	250V
C6586	1-113-924-11	CERAMIC	0.0047µF	20%	125V
C6587	1-113-924-11	CERAMIC	0.0047µF	20%	125V
C6588	1-113-924-11	CERAMIC	0.0047µF	20%	125V
C6589	1-113-924-11	CERAMIC	0.0047µF	20%	125V
C6590	1-131-940-11	ELECT	1200µF	20%	250V
⚠ C6591	1-119-899-51	CERAMIC	1000pF	10%	250V
C6594	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C6595	1-104-665-11	ELECT	100µF	20%	25V
C6596	1-126-960-11	ELECT	1µF	20%	50V
C8002	1-136-169-00	FILM	0.22µF	5%	50V
C8004	1-104-665-11	ELECT	100µF	20%	10V
C8005	1-126-947-11	ELECT	47µF	20%	25V
C8006	1-126-960-11	ELECT	1µF	20%	50V
C8007	1-137-150-11	MYLAR	0.01µF	5%	50V
C8009	1-126-964-11	ELECT	10µF	20%	50V
C8011	1-126-961-11	ELECT	2.2µF	20%	50V
C8012	1-126-966-11	ELECT	33µF	20%	50V
C8013	1-126-964-11	ELECT	10µF	20%	50V
C8014	1-126-964-11	ELECT	10µF	20%	50V
C8015	1-126-966-11	ELECT	33µF	20%	50V
C8016	1-130-495-00	MYLAR	0.1µF	5%	50V
C8017	1-126-964-11	ELECT	10µF	20%	50V
C8018	1-126-964-11	ELECT	10µF	20%	50V
C8019	1-104-665-11	ELECT	100µF	20%	10V
C8020	1-136-103-00	FILM	0.1µF	5%	200V
C8021	1-137-150-11	MYLAR	0.01µF	5%	50V
C8022	1-126-933-11	ELECT	100µF	20%	16V
C8023	1-113-611-11	ELECT(BLOCK)	820µF	20%	250V
C8024	1-126-967-11	ELECT	47µF	20%	50V
C8025	1-126-947-11	ELECT	47µF	20%	25V
C8027	1-130-495-00	MYLAR	0.1µF	5%	50V
C8028	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C8030	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C8031	1-128-551-11	ELECT	22μF	20%	25V
	C8032	1-136-813-11	FILM	680pF	2%	50V
	C8033	1-126-964-11	ELECT	10μF	20%	50V
	C8035	1-125-969-91	CERAMIC	680pF	10%	1KV
	C8036	1-125-969-91	CERAMIC	680pF	10%	1KV
	C8037	1-135-946-21	FILM	47000pF	3%	800V
	C8039	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
	C8040	1-126-969-11	ELECT	220μF	20%	50V
	C8041	1-137-194-81	FILM	0.47μF	5%	50V
	C8042	1-136-103-00	FILM	0.1μF	5%	200V
	C8045	1-130-471-00	MYLAR	0.001μF	5%	50V
	C8046	1-162-131-11	CERAMIC	220pF	10%	2KV
	C8047	1-107-444-11	CERAMIC	100pF	10%	2KV
	C8048	1-130-495-00	MYLAR	0.1μF	5%	50V
	C8050	1-129-718-61	FILM	0.022μF	5%	630V
	C8051	1-126-964-11	ELECT	10μF	20%	50V
	C8053	1-162-117-00	CERAMIC	100pF	10%	500V
	C8054	1-102-244-00	CERAMIC	220pF	10%	500V
	C8055	1-136-535-61	FILM	0.0018μF	5%	630V
	C8056	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
	C8058	1-137-194-81	FILM	0.47μF	5%	50V
	C8059	1-126-947-11	ELECT	47μF	20%	10V
	C8060	1-107-635-11	ELECT	4.7μF	20%	160V
	C8063	1-135-945-21	FILM	10000pF	3%	800V
		CONNECTOR				
*	CN5002	1-580-798-11	CONNECTOR PIN (DY) 6P			
*	CN5003	1-766-242-11	PIN,CONNECTOR (PC BOARD) 4P			
*	CN5501	1-779-889-11	CONNECTOR, BOARD TO BOARD 8P			
*	CN5503	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P			
*	CN5505	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P			
	CN5506	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P			
*	CN5509	1-564-515-11	PLUG,CONNECTOR 12P			
*	CN5510	1-564-506-11	PLUG,CONNECTOR 3P			
*	CN6501	1-766-176-11	PIN,CONNECTOR (PC BOARD)6P			
*	CN6502	1-766-240-11	PIN,CONNECTOR (PC BOARD) 2P			
*	CN6503	1-564-511-11	PLUG,CONNECTOR 8P			
*	CN6504	1-779-889-11	CONNECTOR, BOARD TO BOARD 8P			
*	CN6505	1-779-889-11	CONNECTOR, BOARD TO BOARD 8P			
*	CN6506	1-779-889-11	CONNECTOR, BOARD TO BOARD 8P			
		DIODE				
	D5001	8-719-109-85	DIODE MTZJ-T-77-5.1B			
	D5002	8-719-908-03	DIODE GP08DPKG23			
	D5003	8-719-920-67	DIODE ERC91-02E			
	D5004	8-719-158-49	DIODE UDZ-TE-17-12B			
	D5005	8-719-404-50	DIODE MA111-TX			
	D5006	8-719-109-72	DIODE MTZJ-T-77-3.9B			

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	D5007	8-719-109-51	DIODE RD2.0ES-T1B1	
	D5008	8-719-404-50	DIODE MA111-TX	
	D5009	8-719-404-50	DIODE MA111-TX	
	D5010	8-719-404-50	DIODE MA111-TX	
	D5011	8-719-109-63	DIODE RD3.0ES-T1B2	
	D5012	8-719-018-82	DIODE RGP02-20EL-6394	
	D5013	8-719-302-43	DIODE RGP10GPKG23	
	D5014	8-719-510-37	DIODE D5LC20U	
	D5015	8-719-302-43	DIODE RGP10GPKG23	
	D5016	8-719-920-67	DIODE ERC91-02E	
	D5017	8-719-920-67	DIODE ERC91-02E	
	D5018	8-719-110-41	DIODE MTZJ-T-77-15B	
	D5019	8-719-404-50	DIODE MA111-TX	
	D5021	8-719-404-50	DIODE MA111-TX	
	D5023	8-719-061-21	DIODE PG124S15	
	D5024	8-719-510-02	DIODE D1NS4-TR	
	D5025	8-719-510-02	DIODE D1NS4-TR	
	D5026	8-719-404-50	DIODE MA111-TX	
	D5027	8-719-404-50	DIODE MA111-TX	
	D5028	8-719-404-50	DIODE MA111-TX	
	D5029	8-719-404-50	DIODE MA111-TX	
	D5031	8-719-977-28	DIODE UDZSTE-1710B	
	D5032	8-719-404-50	DIODE MA111-TX	
	D5501	8-719-404-50	DIODE MA111-TX	
	D5502	8-719-404-50	DIODE MA111-TX	
	D5503	8-719-404-50	DIODE MA111-TX	
	D5505	8-719-800-76	DIODE MA153-TX	
	D5506	8-719-404-50	DIODE MA111-TX	
	D5507	8-719-800-76	DIODE MA153-TX	
	D5513	8-719-991-33	DIODE 1SS133T-77	
	D5514	8-719-063-70	DIODE D1NL20U-TA2	
	D5515	8-719-063-70	DIODE D1NL20U-TA2	
	D5522	8-719-923-78	DIODE MTZJ-T-77-12	
	D5523	8-719-923-78	DIODE MTZJ-T-77-12	
	D6501	8-719-404-50	DIODE MA111-TX	
	D6502	8-719-979-64	DIODE μF4005PKG23	
	D6507	1-216-295-91	SHORT	
	D6508	8-719-982-27	DIODE MTZJ-T-77-33C	
	D6509	8-719-068-00	DIODE ERC04-06SE (KV-38DRC2 ONLY)	
	D6510	8-719-068-00	DIODE ERC04-06SE (KV-38DRC2 ONLY)	
	D6513	8-719-500-71	DIODE D8LC40F	
⚠	D6514	8-719-060-89	DIODE D4SBS6-F	
	D6515	8-719-060-90	DIODE S2L60F	
	D6516	8-719-060-89	DIODE D4SBS6-F	
	D6517	8-719-060-90	DIODE S2L60F	
	D6522	8-719-404-50	DIODE MA111-TX	
	D6530	8-719-022-99	DIODE D6SB60L	

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	REF. NO.	PART NO.	DESCRIPTION	VALUES
	D6531	8-719-404-50	DIODE MA111-TX	
	D6532	8-719-948-45	DIODE ERA22-08TP3	
	D6533	8-719-404-50	DIODE MA111-TX	
	D6537	8-719-404-50	DIODE MA111-TX	
	D8002	8-719-404-50	DIODE MA111-TX	
	D8003	8-719-404-50	DIODE MA111-TX	
⚠	D8004	8-719-109-85	DIODE MTZJ-T-77-5.1B	
	D8005	8-719-404-50	DIODE MA111-TX	
	D8006	8-719-921-89	DIODE MTZJ-T-77-13C	
	D8007	8-719-404-50	DIODE MA111-TX	
	D8009	8-719-404-50	DIODE MA111-TX	
	D8010	8-719-052-90	DIODE D1NL40-TA2	
⚠	D8013	8-719-063-70	DIODE D1NL20U-TA2	
	D8014	8-719-302-43	DIODE RGP10GPKG23	
	D8016	8-719-948-45	DIODE ERA22-08TP3	
	D8017	8-719-948-45	DIODE ERA22-08TP3	
	D8018	8-719-052-90	DIODE D1NL40-TA2	
⚠	D8019	8-719-110-41	DIODE MTZJ-T-77-15B	
	D8020	8-719-404-50	DIODE MA111-TX	
	D8021	8-719-404-50	DIODE MA111-TX	
	D8022	8-719-404-50	DIODE MA111-TX	
	D8025	8-719-982-26	DIODE MTZJ-T-77-33B	
	D8026	8-719-404-50	DIODE MA111-TX	
	D8027	8-719-404-50	DIODE MA111-TX	
	D8028	8-719-991-33	DIODE 1SS133T-77	
	D8050	8-719-923-86	DIODE MTZJ-T-77-15	
	D8051	8-719-923-86	DIODE MTZJ-T-77-15	

FERRITE BEAD

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	FB5001	1-410-397-21	FERRITE	1.1μH
	FB5002	1-543-298-11	FERRITE	0μH
	FB6501	1-410-397-21	FERRITE	1.1μH
	FB6502	1-410-396-41	FERRITE	0.45μH
	FB6504	1-410-397-21	FERRITE	1.1μH
	FB6505	1-412-911-11	FERRITE	0μH
	FB6506	1-412-911-11	FERRITE	0μH
	FB6508	1-410-396-41	FERRITE	0.45μH
	FB6509	1-410-396-41	FERRITE	0.45μH
	FB8001	1-410-396-41	FERRITE	0.45μH

IC

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	IC5001	8-759-701-01	IC NJM2904M(TE2)	
	IC5002	8-759-700-07	IC NJM2903M-TE2	
	IC5003	8-759-518-68	IC PQ12RF21	
⚠	IC5004	8-759-192-71	IC STV9379	
⚠	IC5005	8-759-803-42	IC LA6500-FA	
	IC5006	8-749-013-76	IC PQ6RD83B	
	IC5007	8-759-981-61	IC NJM2901M-TE2	
	IC5008	8-759-675-90	IC BA51W12ST-V5	
	IC5501	6-700-149-01	IC M24C04-MN6T(A)	
	IC5502	8-759-981-61	IC NJM2901M-TE2	
	IC5504	8-759-803-42	IC LA6500-FA	
	IC5506	8-759-803-42	IC LA6500-FA	
⚠	IC5510	8-759-803-42	IC LA6500-FA	
	IC5511	8-752-074-64	IC CXA2026AS	
	IC5512	8-759-929-65	IC NJM79M12FA	
	IC5513	8-759-595-52	IC CXA8070AP	
	IC5514	8-759-803-42	IC LA6500-FA	
	IC5515	8-749-016-08	IC STK390-910	
⚠	IC6501	8-759-670-30	IC MCZ3001D	
	IC6503	8-749-012-13	IC DM-58	
	IC6505	8-749-921-86	IC SE-140N	
	IC8001	8-759-981-61	IC NJM2901M-TE2	
⚠	IC8002	8-759-670-30	IC MCZ3001D	
	IC8003	8-759-198-31	IC UPC1093J-1-T	
	IC8004	8-759-701-01	IC NJM2904M(TE2)	

CHIP CONDUCTOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	JR5006	1-216-295-91	SHORT	
	JR5007	1-216-295-91	SHORT	
	JR5010	1-216-295-91	SHORT	
	JR5502	1-216-295-91	SHORT	
	JR6501	1-216-295-91	SHORT	
	JR8001	1-216-295-91	SHORT	
	JR8002	1-216-295-91	SHORT	
	JR8003	1-216-295-91	SHORT	
	JR8004	1-216-295-91	SHORT	
	JR8005	1-216-295-91	SHORT	
	JR8006	1-216-295-91	SHORT	
	JR8007	1-216-295-91	SHORT	
	JR8051	1-216-295-91	SHORT (KV-38DRC2 ONLY)	
	JR8052	1-216-295-91	SHORT (KV-38DRC2C ONLY)	

COIL

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	L5001	1-406-665-11	INDUCTOR	100μH
	L5002	1-406-663-21	INDUCTOR	47μH
	L5003	1-406-892-21	INDUCTOR	4mH
	L5004	1-412-525-31	INDUCTOR	10μH
	L5005	1-419-181-11	COIL, HORIZONTAL LINEARITY	
	L5504	1-406-989-21	INDUCTOR	10mH
	L5505	1-406-989-21	INDUCTOR	10mH
	L5601	1-408-612-31	INDUCTOR	56μH
	L6503	1-412-525-31	INDUCTOR	10μH
	L6504	1-412-525-31	INDUCTOR	10μH
	L6505	1-406-665-11	INDUCTOR	100μH
	L8001	1-406-670-11	INDUCTOR	680μH
	L8002	1-419-658-11	INDUCTOR	107μH
	L8005	1-406-674-11	INDUCTOR	3.3mH

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
			PHOTO COUPLER			
	PH6501	8-749-924-35	PHOTO COUPLER ON3171-R			
⚠	PH6502	8-749-924-35	PHOTO COUPLER ON3171-R			
⚠	PH6503	8-749-924-35	PHOTO COUPLER ON3171-R			
	PH8001	8-749-924-35	PHOTO COUPLER ON3171-R			
			IC LINK			
⚠	PS6501	1-576-390-91	LINK, IC			
⚠	PS6502	1-576-390-91	LINK, IC			
			TRANSISTOR			
	Q5001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5002	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
⚠	Q5003	8-729-015-28	TRANSISTOR IRFI9630G			
	Q5004	8-729-019-57	TRANSISTOR 2SA1208S-TP			
	Q5005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5006	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5007	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q5008	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q5011	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5012	8-729-119-80	TRANSISTOR 2SC2688-LK			
	Q5013	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q5014	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
⚠	Q5015	8-729-119-80	TRANSISTOR 2SC2688-LK			
⚠	Q5016	8-729-119-80	TRANSISTOR 2SC2688-LK			
	Q5017	8-729-119-80	TRANSISTOR 2SC2688-LK			
	Q5018	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5019	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5020	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q5021	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5022	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q5023	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5026	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5027	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q5028	8-729-322-27	TRANSISTOR 2SK2182			
⚠	Q5030	8-729-052-71	TRANSISTOR 2SC3997S-SONY-RA			
	Q5031	8-729-053-24	TRANSISTOR 2SK3262-01MR			
	Q5033	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q5034	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5035	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5036	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5037	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5501	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5502	1-801-806-11	TRANSISTOR DTC144EKA-T146			
	Q5503	1-801-806-11	TRANSISTOR DTC144EKA-T146			
	Q5504	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5505	1-801-806-11	TRANSISTOR DTC144EKA-T146			
	Q5506	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5507	8-729-931-45	TRANSISTOR IRF614			
	Q5508	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q5509	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q6503	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
⚠	Q6506	8-729-052-32	TRANSISTOR IRFIB7N50A-LF31			
	Q6507	8-729-052-32	TRANSISTOR IRFIB7N50A-LF31			
	Q6520	8-729-019-57	TRANSISTOR 2SA1208S-TP			
	Q6521	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
	Q6522	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA			
	Q6524	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA			
	Q6526	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q6527	8-729-023-22	TRANSISTOR 2SD2114KT146			
	Q6528	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q6529	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q6530	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q6531	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q6532	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q8001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q8002	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q8003	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q8004	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q8007	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q8008	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q8009	8-729-200-17	TRANSISTOR 2SA1091O-TPE2			
	Q8010	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
⚠	Q8013	8-729-044-42	TRANSISTOR IRFI644G-LF36			
⚠	Q8014	8-729-044-42	TRANSISTOR IRFI644G-LF36			
	Q8015	8-729-119-80	TRANSISTOR 2SC2688-LK			
	Q8016	8-729-045-65	TRANSISTOR 2SA1776TV2Q			
	Q8018	8-729-043-95	TRANSISTOR 2SC3840K			
	Q8019	1-801-806-11	TRANSISTOR DTC144EKA-T146			
	Q8020	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q8022	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q8023	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
			RESISTOR			
	R5001	1-216-001-00	RES-CHIP	10	5%	1/10W
	R5002	1-216-033-00	RES-CHIP	220	5%	1/10W
	R5003	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R5004	1-216-099-00	RES-CHIP	120K	5%	1/10W
	R5005	1-216-033-00	RES-CHIP	220	5%	1/10W
	R5007	1-216-099-00	RES-CHIP	120K	5%	1/10W
	R5008	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R5009	1-216-099-00	RES-CHIP	120K	5%	1/10W
	R5011	1-216-099-00	RES-CHIP	120K	5%	1/10W
	R5012	1-208-814-91	METAL CHIP	22K	0.50%	1/10W
	R5013	1-216-393-00	METAL OXIDE	2.2	5%	3W
	R5014	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R5016	1-208-832-11	METAL CHIP	120K	0.50%	1/10W
R5017	1-208-832-11	METAL CHIP	120K	0.50%	1/10W
R5018	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5019	1-249-429-11	CARBON	10K	5%	1/4W
R5020	1-208-800-11	METAL CHIP	5.6K	0.50%	1/10W
R5021	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
R5022	1-208-816-11	METAL CHIP	27K	0.50%	1/10W
R5023	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5024	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5025	1-208-800-11	METAL CHIP	5.6K	0.50%	1/10W
R5026	1-216-049-11	RES-CHIP	1K	5%	1/10W
R5027	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
R5028	1-208-822-11	METAL CHIP	47K	0.50%	1/10W
R5029	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
R5030	1-216-295-91	SHORT			
R5031	1-208-782-11	METAL CHIP	1K	0.50%	1/10W
R5033	1-216-025-11	RES-CHIP	100	5%	1/10W
R5036	1-216-085-91	RES-CHIP	33K	5%	1/10W
R5037	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5038	1-216-075-00	RES-CHIP	12K	5%	1/10W
R5039	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5040	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5041	1-249-383-11	CARBON	1.5	5%	1/4W
R5042	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5043	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
R5044	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5045	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5046	1-214-798-21	METAL	1.8	1%	1/2W
R5047	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5048	1-208-802-11	METAL CHIP	6.8K	0.50%	1/10W
R5049	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5050	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5051	1-249-414-11	CARBON	560	5%	1/4W
R5052	1-214-796-00	METAL	1.5	1%	1/2W
R5053	1-215-890-11	METAL OXIDE	470	5%	2W
R5054	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5055	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5056	1-216-105-91	RES-CHIP	220K	5%	1/10W
R5057	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5058	1-216-113-00	RES-CHIP	470K	5%	1/10W
R5059	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5063	1-208-813-11	METAL CHIP	20K	0.50%	1/10W
R5064	1-218-761-11	METAL CHIP	240K	0.50%	1/10W
R5065	1-218-761-11	METAL CHIP	240K	0.50%	1/10W
R5066	1-208-792-11	METAL CHIP	2.7K	0.50%	1/10W
R5067	1-208-794-11	METAL CHIP	3.3K	0.50%	1/10W
R5068	1-216-105-91	RES-CHIP	220K	5%	1/10W
R5069	1-216-113-00	RES-CHIP	470K	5%	1/10W
R5070	1-216-113-00	RES-CHIP	470K	5%	1/10W
R5071	1-208-810-11	METAL CHIP	15K	0.50%	1/10W
R5072	1-208-810-11	METAL CHIP	15K	0.50%	1/10W
R5073	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
R5074	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
R5075	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
R5076	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
R5077	1-208-816-11	METAL CHIP	27K	0.50%	1/10W
R5078	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
R5079	1-208-810-11	METAL CHIP	15K	0.50%	1/10W
R5080	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5081	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
R5082	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R5083	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W
R5084	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5085	1-216-113-00	RES-CHIP	470K	5%	1/10W
R5086	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5087	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5088	1-216-049-11	RES-CHIP	1K	5%	1/10W
R5089	1-216-372-11	METAL OXIDE	1.8	5%	2W
R5090	1-216-372-11	METAL OXIDE	1.8	5%	2W
⚠ R5091	1-249-389-11	CARBON	4.7	5%	1/4W
R5092	1-216-049-11	RES-CHIP	1K	5%	1/10W
R5093	1-208-807-11	METAL CHIP	11K	0.50%	1/10W
R5094	1-215-869-11	METAL OXIDE	1K	5%	1W
⚠ R5095	1-249-443-11	CARBON	0.47	5%	1/4W
⚠ R5096	1-249-443-11	CARBON	0.47	5%	1/4W
⚠ R5097	1-249-380-11	CARBON	0.82	5%	1/4W
⚠ R5098	1-249-379-11	CARBON	0.68	5%	1/4W
R5101	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
R5102	1-208-782-11	METAL CHIP	1K	0.50%	1/10W
R5103	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W
R5104	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5105	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5106	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5107	1-249-401-11	CARBON	47	5%	1/4W
R5108	1-208-819-11	METAL CHIP	36K	0.50%	1/10W
R5109	1-208-808-11	METAL CHIP	12K	0.50%	1/10W
R5110	1-249-401-11	CARBON	47	5%	1/4W
R5111	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5112	1-216-033-00	RES-CHIP	220	5%	1/10W
R5113	1-249-425-11	CARBON	4.7K	5%	1/4W
R5114	1-249-425-11	CARBON	4.7K	5%	1/4W
R5115	1-249-417-11	CARBON	1K	5%	1/4W
R5116	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5117	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R5120	1-216-049-11	RES-CHIP	1K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R5121	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5122	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5123	1-216-295-91	SHORT			
R5124	1-216-295-91	SHORT			
R5125	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5126	1-216-025-11	RES-CHIP	100	5%	1/10W
R5127	1-215-890-11	METAL OXIDE	470	5%	2W
R5128	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5129	1-216-025-11	RES-CHIP	100	5%	1/10W
R5130	1-249-401-11	CARBON	47	5%	1/4W
R5131	1-208-794-11	METAL CHIP	3.3K	0.50%	1/10W
R5132	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5133	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5134	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5135	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5136	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5137	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5138	1-216-049-11	RES-CHIP	1K	5%	1/10W
R5139	1-216-049-11	RES-CHIP	1K	5%	1/10W
R5140	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5141	1-215-915-11	METAL OXIDE	470	5%	3W
R5142	1-216-386-11	METAL OXIDE	0.56	5%	3W
R5143	1-216-385-11	METAL OXIDE	0.47	5%	3W
R5144	1-216-385-11	METAL OXIDE	0.47	5%	3W
R5145	1-215-880-00	METAL OXIDE	10	5%	2W
R5146	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5147	1-208-794-11	METAL CHIP	3.3K	0.50%	1/10W
R5148	1-215-865-11	METAL OXIDE	220	5%	1W
R5149	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5150	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5151	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5152	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5153	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5154	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5155	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5156	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5157	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5158	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5159	1-216-025-11	RES-CHIP	100	5%	1/10W
R5160	1-216-025-11	RES-CHIP	100	5%	1/10W
R5161	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5163	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R5164	1-260-288-11	CARBON	0.47	5%	1/2W
R5501	1-216-033-00	RES-CHIP	220	5%	1/10W
R5502	1-216-295-91	SHORT			
R5503	1-216-017-91	RES-CHIP	47	5%	1/10W
R5504	1-208-840-11	METAL CHIP	270K	0.50%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R5505	1-208-840-11	METAL CHIP	270K	0.50%	1/10W
R5506	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5507	1-216-017-91	RES-CHIP	47	5%	1/10W
R5508	1-216-025-11	RES-CHIP	100	5%	1/10W
R5509	1-216-025-11	RES-CHIP	100	5%	1/10W
R5510	1-216-025-11	RES-CHIP	100	5%	1/10W
R5511	1-216-295-91	SHORT			
R5512	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5513	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5514	1-216-295-91	SHORT			
R5516	1-208-792-11	METAL CHIP	2.7K	0.50%	1/10W
R5518	1-208-822-11	METAL CHIP	47K	0.50%	1/10W
R5519	1-208-822-11	METAL CHIP	47K	0.50%	1/10W
R5520	1-208-816-11	METAL CHIP	27K	0.50%	1/10W
R5521	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5522	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5523	1-208-822-11	METAL CHIP	47K	0.50%	1/10W
R5525	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R5526	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5527	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5528	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5529	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5530	1-216-025-11	RES-CHIP	100	5%	1/10W
R5531	1-216-001-00	RES-CHIP	10	5%	1/10W
R5532	1-216-001-00	RES-CHIP	10	5%	1/10W
R5535	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R5536	1-208-810-11	METAL CHIP	15K	0.50%	1/10W
R5544	1-208-812-11	METAL CHIP	18K	0.50%	1/10W
R5545	1-208-818-11	METAL CHIP	33K	0.50%	1/10W
R5547	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5548	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5554	1-208-812-11	METAL CHIP	18K	0.50%	1/10W
R5563	1-208-801-11	METAL CHIP	6.2K	0.50%	1/10W
R5564	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
R5565	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
R5573	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5576	1-249-395-11	CARBON	15	5%	1/4W
R5577	1-208-836-11	METAL CHIP	180K	0.50%	1/10W
R5578	1-208-812-11	METAL CHIP	18K	0.50%	1/10W
R5579	1-216-113-00	RES-CHIP	470K	5%	1/10W
R5581	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R5585	1-208-846-11	METAL CHIP	470K	0.50%	1/10W
R5588	1-216-353-00	METAL OXIDE	2.2	5%	1W
R5599	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5615	1-249-395-11	CARBON	15	5%	1/4W
R5623	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5645	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5647	1-208-758-11	METAL CHIP	100	0.50%	1/10W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R5648	1-216-385-11	METAL OXIDE	0.47	5%	3W
	R5649	1-215-886-11	METAL OXIDE	100	5%	2W
	R5650	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R5657	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
	R5666	1-216-091-00	RES-CHIP	56K	5%	1/10W
	R5669	1-208-789-11	METAL CHIP	2K	0.50%	1/10W
	R5670	1-208-820-11	METAL CHIP	39K	0.50%	1/10W
	R5672	1-216-109-00	RES-CHIP	330K	5%	1/10W
	R5678	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W
⚠	R5679	1-249-395-11	CARBON	15	5%	1/4W
	R5680	1-249-383-11	CARBON	1.5	5%	1/4W
	R5684	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
	R5685	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
	R5686	1-208-778-11	METAL CHIP	680	0.50%	1/10W
	R5688	1-208-782-11	METAL CHIP	1K	0.50%	1/10W
	R5689	1-216-017-91	RES-CHIP	47	5%	1/10W
	R5690	1-216-017-91	RES-CHIP	47	5%	1/10W
	R5692	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
	R5693	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
	R5694	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
	R5696	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W
	R5697	1-208-764-11	METAL CHIP	180	0.50%	1/10W
	R5698	1-208-801-11	METAL CHIP	6.2K	0.50%	1/10W
	R5699	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R5700	1-208-810-11	METAL CHIP	15K	0.50%	1/10W
	R5702	1-208-782-11	METAL CHIP	1K	0.50%	1/10W
	R5704	1-214-657-11	METAL	1	1%	1/4W
	R5705	1-214-657-11	METAL	1	1%	1/4W
	R5707	1-216-017-91	RES-CHIP	47	5%	1/10W
	R5708	1-216-429-00	METAL OXIDE	270	5%	1W
	R5709	1-216-017-91	RES-CHIP	47	5%	1/10W
	R5710	1-216-429-00	METAL OXIDE	270	5%	1W
	R5711	1-260-288-11	CARBON	0.47	5%	1/2W
	R5712	1-260-288-11	CARBON	0.47	5%	1/2W
	R5713	1-215-867-00	METAL OXIDE	470	5%	1W
	R5714	1-216-097-11	RES-CHIP	100K	5%	1/10W
	R5715	1-216-097-11	RES-CHIP	100K	5%	1/10W
	R5716	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R5717	1-216-093-91	RES-CHIP	68K	5%	1/10W
	R6501	1-208-757-11	METAL CHIP	91	0.50%	1/10W
	R6502	1-260-131-11	CARBON	470K	5%	1/2W
	R6503	1-208-758-11	METAL CHIP	100	0.50%	1/10W
	R6504	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6506	1-249-377-11	CARBON	0.47	5%	1/4W
	R6507	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
	R6508	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6509	1-216-065-91	RES-CHIP	4.7K	5%	1/10W

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R6510	1-215-859-00	METAL OXIDE	22	5%	1W
	R6511	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6512	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6513	1-215-481-00	METAL	330K	1%	1/4W
	R6514	1-215-481-00	METAL	330K	1%	1/4W
	R6515	1-260-131-11	CARBON	470K	5%	1/2W
⚠	R6516	1-202-962-11	CEMENTED	3.3	5%	10W
	R6517	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W
	R6518	1-208-810-11	METAL CHIP	15K	0.50%	1/10W
	R6519	1-216-295-91	SHORT			
	R6521	1-260-328-11	CARBON	1K	5%	1/2W
	R6522	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6523	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R6524	1-216-295-91	SHORT			
	R6525	1-216-041-00	RES-CHIP	470	5%	1/10W
⚠	R6526	1-202-933-61	FUSIBLE	0.1	10%	1/2W
	R6527	1-216-093-91	RES-CHIP	68K	5%	1/10W
	R6528	1-216-025-11	RES-CHIP	100	5%	1/10W
	R6529	1-249-393-11	CARBON	10	5%	1/4W
	R6530	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
	R6531	1-249-393-11	CARBON	10	5%	1/4W
	R6532	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6533	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6534	1-216-085-91	RES-CHIP	33K	5%	1/10W
	R6535	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6536	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6537	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6538	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6539	1-215-900-11	METAL OXIDE	22K	5%	2W
	R6540	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R6541	1-216-077-91	RES-CHIP	15K	5%	1/10W
	R6542	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R6543	1-208-842-11	METAL CHIP	330K	0.50%	1/10W
	R6544	1-216-295-91	SHORT			
	R6547	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
	R6550	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
	R6552	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R6553	1-216-109-00	RES-CHIP	330K	5%	1/10W
	R6556	1-217-625-00	METAL	0.05	10%	2W
	R6557	1-216-097-11	RES-CHIP	100K	5%	1/10W
	R6583	1-216-077-91	RES-CHIP	15K	5%	1/10W
⚠	R6590	1-249-415-11	CARBON	680	5%	1/4W
	R6591	1-216-341-11	METAL OXIDE	0.22	5%	1W
⚠	R6593	1-249-405-11	CARBON	100	5%	1/4W
	R6596	1-215-445-00	METAL	10K	1%	1/4W
	R6597	1-215-469-00	METAL	100K	1%	1/4W
	R6598	1-216-342-21	METAL OXIDE	0.27	5%	1W
	R6599	1-249-417-11	CARBON	1K	5%	1/4W

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NOTE: Les composants identifies par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R6600	1-215-445-00	METAL	10K	1%	1/4W
	R6602	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R6603	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6604	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6605	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
	R6612	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R6614	1-260-298-51	CARBON	3.3	5%	1/2W
	R6646	1-215-481-00	METAL	330K	1%	1/4W
	R8001	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R8002	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
	R8003	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R8004	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R8005	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R8006	1-216-105-91	RES-CHIP	220K	5%	1/10W
	R8007	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R8008	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R8009	1-216-105-91	RES-CHIP	220K	5%	1/10W
	R8010	1-216-105-91	RES-CHIP	220K	5%	1/10W
	R8011	1-216-105-91	RES-CHIP	220K	5%	1/10W
	R8013	1-216-295-91	SHORT			
	R8016	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
	R8017	1-216-295-91	SHORT			
	R8018	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R8019	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R8020	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R8021	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R8022	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R8023	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R8024	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R8025	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
	R8026	1-216-105-91	RES-CHIP	220K	5%	1/10W
	R8027	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
	R8028	1-208-818-11	METAL CHIP	33K	0.50%	1/10W
	R8029	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
	R8030	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
	R8031	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
	R8032	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R8033	1-208-781-11	METAL CHIP	910	0.50%	1/10W
	R8034	1-216-091-00	RES-CHIP	56K	5%	1/10W
⚠	R8035	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W
⚠	R8036	1-215-444-00	METAL	9.1K	1%	1/4W
⚠	R8037	1-215-444-00	METAL	9.1K	1%	1/4W
⚠	R8038	1-215-444-00	METAL	9.1K	1%	1/4W
⚠	R8039	1-215-444-00	METAL	9.1K	1%	1/4W
⚠	R8040	1-215-444-00	METAL	9.1K	1%	1/4W
	R8041	1-208-782-11	METAL CHIP	1K	0.50%	1/10W
	R8042	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
	R8043	1-216-349-00	METAL OXIDE	1	5%	1W

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R8044	1-208-837-11	METAL CHIP	200K	0.50%	1/10W
	R8047	1-216-097-11	RES-CHIP	100K	5%	1/10W
	R8049	1-208-758-11	METAL CHIP	100	0.50%	1/10W
	R8050	1-211-964-11	METAL CHIP	33	0.50%	1/10W
⚠	R8051	1-220-926-11	FUSIBLE	0.47	10%	1/2W
	R8053	1-208-842-11	METAL CHIP	330K	0.50%	1/10W
	R8054	1-208-842-11	METAL CHIP	330K	0.50%	1/10W
	R8055	1-208-842-11	METAL CHIP	330K	0.50%	1/10W
	R8056	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W
	R8057	1-208-809-11	METAL CHIP	13K	0.50%	1/10W
	R8058	1-249-393-11	CARBON	10	5%	1/4W
	R8059	1-216-295-91	SHORT			
	R8060	1-208-774-11	METAL CHIP	470	0.50%	1/10W
	R8061	1-249-393-11	CARBON	10	5%	1/4W
	R8062	1-216-073-91	RES-CHIP	10K	5%	1/10W
⚠	R8063	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R8065	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R8066	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R8068	1-216-295-91	SHORT			
	R8069	1-249-419-11	CARBON	1.5K	5%	1/4W
	R8070	1-217-611-00	METAL	0.1	10%	2W
	R8071	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R8072	1-208-782-11	METAL CHIP	1K	0.50%	1/10W
	R8073	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W
	R8074	1-208-793-11	METAL CHIP	3K	0.50%	1/10W
	R8077	1-208-838-91	METAL CHIP	220K	0.50%	1/10W
	R8078	1-208-838-91	METAL CHIP	220K	0.50%	1/10W
	R8080	1-249-431-11	CARBON	15K	5%	1/4W
⚠	R8081	1-249-377-11	CARBON	0.47	5%	1/4W
	R8082	1-216-133-91	RES-CHIP	3.3M	5%	1/10W
	R8085	1-219-749-91	CARBON	10K	5%	1/2W
	R8086	1-219-751-91	CARBON	47K	5%	1/2W
	R8087	1-216-295-91	SHORT			
	R8089	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R8091	1-215-485-00	METAL	470K	1%	1/4W
	R8093	1-216-101-00	RES-CHIP	150K	5%	1/10W
	R8095	1-215-485-00	METAL	470K	1%	1/4W
	R8096	1-216-295-91	SHORT			
	R8098	1-249-441-11	CARBON	100K	5%	1/4W
	R8099	1-249-441-11	CARBON	100K	5%	1/4W
	R8100	1-249-441-11	CARBON	100K	5%	1/4W
	R8101	1-216-101-00	RES-CHIP	150K	5%	1/10W
	R8102	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R8103	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
	R8104	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R8108	1-216-097-11	RES-CHIP	100K	5%	1/10W
	R8109	1-215-922-11	METAL OXIDE	6.8K	5%	3W
	R8111	1-215-922-11	METAL OXIDE	6.8K	5%	3W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

A component identified by this ⧓ symbol indicates that it has been carefully factory-selected to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R8112	1-216-097-11	RES-CHIP	100K	5%	1/10W
	R8113	1-216-117-00	RES-CHIP	680K	5%	1/10W
	R8114	1-215-922-11	METAL OXIDE	6.8K	5%	3W
	R8115	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R8116	1-216-486-21	METAL OXIDE	8.2K	5%	3W
	R8117	1-216-097-11	RES-CHIP	100K	5%	1/10W
	R8118	1-216-085-91	RES-CHIP	33K	5%	1/10W
	R8119	1-216-486-21	METAL OXIDE	8.2K	5%	3W
	R8123	1-216-025-11	RES-CHIP	100	5%	1/10W
	R8124	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R8125	1-216-001-00	RES-CHIP	10	5%	1/10W
	R8126	1-216-001-00	RES-CHIP	10	5%	1/10W
	R8127	1-216-295-91	SHORT			
⚠	R8137	1-249-417-11	CARBON	1K	5%	1/4W
	R8144	1-216-025-11	RES-CHIP	100	5%	1/10W
	R8145	1-216-025-11	RES-CHIP	100	5%	1/10W
	R8146	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R8147	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
	R8148	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
	R8149	1-208-822-11	METAL CHIP	47K	0.50%	1/10W
	R8150	1-216-091-00	RES-CHIP	56K	5%	1/10W
	R8151	1-216-091-00	RES-CHIP	56K	5%	1/10W
	R8152	1-216-091-00	RES-CHIP	56K	5%	1/10W
	R8199	1-249-389-11	CARBON	4.7	5%	1/4W
		VARIABLE RESISTOR				
⚠⧓	RV8001	1-225-630-91	RES, VAR, ADJ, CERMET	20K		
⚠⧓	RV8002	1-225-627-91	RES, VAR, ADJ, CERMET	2K		
		RELAY				
⚠	RY6501	1-755-395-11	RELAY (AC POWER)			
⚠	RY6502	1-755-214-11	RELAY, AC POWER			
		SPARK GAP				
	SG8002	1-517-499-21	GAP, SPARK			
	SG8005	1-517-499-21	GAP, SPARK			
		TRANSFORMER				
	T5001	1-435-621-11	TRANSFORMER, HORIZONTAL OUTPUT			
	T5002	1-435-636-11	TRANSFORMER, HORIZONTAL DRIVE			
⚠	T6501	1-435-576-12	TRANSFORMER, CONVERTER (PIT)			
⚠	T8001	1-453-346-11	FBT ASSY NX-6000//J1J4			
	T8002	1-433-934-11	TRANSFORMER, FERRITE (DFT)			
		THERMISTOR				
	TH5001	1-800-193-00	THERMISTOR			
	TH5002	1-807-796-11	THERMISTOR			

HB

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
*		**A-1372-904-A**	**HB (COM) MOUNTED PC BOARD**			
		CAPACITOR				
	C4504	1-126-964-11	ELECT	10µF	20%	50V
	C4505	1-126-964-11	ELECT	10µF	20%	50V
		CONNECTOR				
	CN4503	1-764-334-11	PLUG,CONNECTOR 11P			
		DIODE				
	D4503	8-719-977-28	DIODE UDZSTE-1710B			
	D4505	8-719-977-28	DIODE UDZSTE-1710B			
	D4506	8-719-977-28	DIODE UDZSTE-1710B			
		FILTER				
	FL4501	1-239-583-21	FILTER, EMI			
	FL4502	1-239-583-21	FILTER, EMI			
	FL4503	1-239-583-21	FILTER, EMI			
		JACK				
	J4501	1-770-053-11	TERMINAL BLOCK, S(LIGHT ANGLE)			
		RESISTOR				
	R4506	1-216-113-00	RES-CHIP	470K	5%	1/10W
	R4507	1-216-113-00	RES-CHIP	470K	5%	1/10W
	R4509	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R4511	1-216-295-91	SHORT			
	R4512	1-216-295-91	SHORT			
	R4513	1-216-295-91	SHORT			

HA

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
*		**A-1372-970-A**	**HA MOUNTED PC BOARD**			
		CAPACITOR				
	C05	1-126-964-11	ELECT	10µF	20%	50V
		CONNECTOR				
*	CN01	1-564-515-11	PLUG,CONNECTOR 12P			
		DIODE				
	D01	8-719-074-84	DIODE LNK0120022G1			
	D02	8-719-074-84	DIODE LNK0120022G1			
	D07	8-719-109-89	DIODE RD5.6ES-T1B2			
		IC				
	IC01	8-742-212-20	HYB IC SBX3081-71			

HA U

REF. NO.	PART NO.	DESCRIPTION	VALUES		
		RESISTOR			
R03	1-249-429-11	CARBON	10K	5%	1/4W
R05	1-247-807-31	CARBON	100	5%	1/4W
R07	1-249-409-11	CARBON	220	5%	1/4W
R08	1-249-409-11	CARBON	220	5%	1/4W
R09	1-249-433-11	CARBON	22K	5%	1/4W
R12	1-215-445-00	METAL	10K	1%	1/4W
R14	1-215-437-00	METAL	4.7K	1%	1/4W
R15	1-215-431-00	METAL	2.7K	1%	1/4W
R16	1-215-427-00	METAL	1.8K	1%	1/4W
R17	1-215-425-00	METAL	1.5K	1%	1/4W
R18	1-215-421-00	METAL	1K	1%	1/4W
R19	1-215-419-00	METAL	820	1%	1/4W
R20	1-215-415-00	METAL	560	1%	1/4W
R21	1-215-413-00	METAL	470	1%	1/4W
R22	1-215-413-00	METAL	470	1%	1/4W
R23	1-249-385-11	CARBON	2.2	5%	1/4W
		SWITCH			
S01	1-571-032-41	SWITCH PUSH (1 KEY)			
S02	1-762-837-11	SWITCH TACTILE			
S03	1-762-837-11	SWITCH TACTILE			
S04	1-762-837-11	SWITCH TACTILE			
S05	1-762-837-11	SWITCH TACTILE			
S06	1-692-431-21	SWITCH TACTILE			
S07	1-692-431-21	SWITCH TACTILE			
S08	1-692-431-21	SWITCH TACTILE			
S09	1-692-431-21	SWITCH TACTILE			
S10	1-692-431-21	SWITCH TACTILE			
S11	1-692-431-21	SWITCH TACTILE			

U

REF. NO.	PART NO.	DESCRIPTION	VALUES		
*	**A-1373-817-A**	**U (COM) MOUNTED PC BOARD**			
		CAPACITOR			
C2405	1-126-964-11	ELECT	10μF	20%	50V
C2406	1-126-791-11	ELECT	10μF	20%	16V
C2407	1-126-964-11	ELECT	10μF	20%	50V
C2408	1-126-791-11	ELECT	10μF	20%	16V
C2409	1-126-964-11	ELECT	10μF	20%	50V
C2410	1-126-964-11	ELECT	10μF	20%	50V
C2411	1-126-926-11	ELECT	1000μF	20%	10V
C2412	1-126-964-11	ELECT	10μF	20%	50V
C2413	1-126-964-11	ELECT	10μF	20%	50V
C2414	1-126-791-11	ELECT	10μF	20%	16V
C2415	1-126-964-11	ELECT	10μF	20%	50V
		CONNECTOR			
* CN2401	1-785-303-11	CONNECTOR, DIN (PLUG) 64P			
		DIODE			
D2401	8-719-977-28	DIODE UDZSTE-1710B			
D2402	8-719-977-28	DIODE UDZSTE-1710B			
D2403	8-719-977-28	DIODE UDZSTE-1710B			
D2405	8-719-977-28	DIODE UDZSTE-1710B			
D2406	8-719-977-28	DIODE UDZSTE-1710B			
D2407	8-719-977-28	DIODE UDZSTE-1710B			
D2409	8-719-977-28	DIODE UDZSTE-1710B			
D2410	8-719-800-76	DIODE MA153-TX			
D2411	8-719-977-28	DIODE UDZSTE-1710B			
D2412	8-719-800-76	DIODE MA153-TX			
D2413	8-719-800-76	DIODE MA153-TX			
D2414	8-719-800-76	DIODE MA153-TX			
D2415	8-719-800-76	DIODE MA153-TX			
D2416	8-719-800-76	DIODE MA153-TX			
D2423	8-719-800-76	DIODE MA153-TX			
D2424	8-719-800-76	DIODE MA153-TX			
D2425	8-719-800-76	DIODE MA153-TX			
D2426	8-719-800-76	DIODE MA153-TX			
D2427	8-719-800-76	DIODE MA153-TX			
D2428	8-719-800-76	DIODE MA153-TX			
D2429	8-719-977-28	DIODE UDZSTE-1710B			
D2430	8-719-977-28	DIODE UDZSTE-1710B			
D2431	8-719-977-28	DIODE UDZSTE-1710B			
D2432	8-719-977-28	DIODE UDZSTE-1710B			
D2433	8-719-977-28	DIODE UDZSTE-1710B			
D2434	8-719-977-28	DIODE UDZSTE-1710B			
		JACK			
J2401	1-573-967-12	BLOCK, (S) TERMINAL			
J2402	1-750-517-11	JACK BLOCK, PIN 3P			
J2403	1-750-517-11	JACK BLOCK, PIN 3P			
J2405	1-764-143-11	JACK			
J2406	1-764-143-11	JACK			
J2407	1-774-358-11	JACK BLOCK, PIN			
J2408	1-774-358-11	JACK BLOCK, PIN			
J2409	1-750-516-11	JACK BLOCK, PIN 2P			
		RESISTOR			
R2401	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2402	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2403	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2407	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2408	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2409	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2428	1-216-113-00	RES-CHIP	470K	5%	1/10W

U S W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2430	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2431	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2432	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2433	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2434	1-216-021-00	RES-CHIP	68	5%	1/10W
R2435	1-216-295-91	SHORT			
R2436	1-216-295-91	SHORT			

S

REF. NO.	PART NO.	DESCRIPTION	VALUES		
*	**A-1391-048-A**	**S MOUNTED PC BOARD**			
	CAPACITOR				
C4101	1-126-964-11	ELECT	10μF	20%	50V
C4102	1-126-964-11	ELECT	10μF	20%	50V
C4103	1-126-959-11	ELECT	0.47μF	20%	50V
C4104	1-126-959-11	ELECT	0.47μF	20%	50V
C4105	1-126-968-11	ELECT	100μF	20%	50V
C4106	1-126-968-11	ELECT	100μF	20%	50V
C4107	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C4108	1-126-964-11	ELECT	10μF	20%	50V
C4109	1-126-964-11	ELECT	10μF	20%	50V
C4110	1-115-340-11	CERAMIC CHIP	0.22μF	10%	25V
C4111	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C4112	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C4113	1-115-340-11	CERAMIC CHIP	0.22μF	10%	25V
C4114	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C4115	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C4116	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C4117	1-126-968-11	ELECT	100μF	20%	50V
	CONNECTOR				
CN4101	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P			
	DIODE				
D4101	8-719-914-43	DIODE DAN202K-T-146			
D4102	8-719-914-44	DIODE DAP202K-T-146			
	IC				
IC4101	8-759-686-15	IC NJM2180M (TE2)			
IC4102	8-759-711-10	IC NJU4066BM-T1			
IC4103	8-752-058-68	IC CXA1315M-T4			
	COIL				
L4101	1-408-607-31	INDUCTOR	22μH		
	RESISTOR				
R4101	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R4102	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R4103	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R4104	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R4105	1-216-073-91	RES-CHIP	10K	5%	1/10W
R4106	1-216-097-11	RES-CHIP	100K	5%	1/10W
R4107	1-216-097-11	RES-CHIP	100K	5%	1/10W
R4108	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R4109	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R4110	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R4111	1-216-073-91	RES-CHIP	10K	5%	1/10W
R4112	1-216-049-11	RES-CHIP	1K	5%	1/10W
R4113	1-216-091-00	RES-CHIP	56K	5%	1/10W
R4114	1-216-295-91	SHORT			
R4115	1-216-295-91	SHORT			
R4116	1-216-089-91	RES-CHIP	47K	5%	1/10W
R4117	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R4118	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R4119	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R4120	1-216-073-91	RES-CHIP	10K	5%	1/10W
R4121	1-216-077-91	RES-CHIP	15K	5%	1/10W
R4123	1-216-073-91	RES-CHIP	10K	5%	1/10W
R4124	1-216-049-11	RES-CHIP	1K	5%	1/10W
R4125	1-216-101-00	RES-CHIP	150K	5%	1/10W
R4126	1-216-081-00	RES-CHIP	22K	5%	1/10W
R4127	1-216-073-91	RES-CHIP	10K	5%	1/10W
R4128	1-216-091-00	RES-CHIP	56K	5%	1/10W
R4129	1-216-073-91	RES-CHIP	10K	5%	1/10W
R4130	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R4131	1-216-129-00	RES-CHIP	2.2M	5%	1/10W
R4132	1-216-085-91	RES-CHIP	33K	5%	1/10W
R4133	1-216-092-00	RES-CHIP	62K	5%	1/10W
R4134	1-216-073-91	RES-CHIP	10K	5%	1/10W
R4135	1-216-017-91	RES-CHIP	47	5%	1/10W
R4136	1-216-017-91	RES-CHIP	47	5%	1/10W

W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
*	**A-1372-833-A**	**W MOUNTED PC BOARD**			
	4-382-854-01	SCREW (M3X8), P, SW (+)			
	CAPACITOR				
C9101	1-107-364-11	MYLAR	0.01μF	10%	200V
C9102	1-107-364-11	MYLAR	0.01μF	10%	200V
C9103	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V
C9104	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V
C9105	1-104-999-11	MYLAR	0.1μF	10%	200V
C9106	1-107-667-11	ELECT	2.2μF	20%	160V
C9107	1-126-935-11	ELECT	470μF	20%	16V
C9108	1-126-935-11	ELECT	470μF	20%	16V

W

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C9109	1-107-963-11	ELECT	33µF	20%	160V
	C9112	1-126-933-11	ELECT	100µF	20%	16V
	C9113	1-126-933-11	ELECT	100µF	20%	16V
	C9115	1-126-935-11	ELECT	470µF	20%	6.3V
	C9116	1-126-935-11	ELECT	470µF	20%	6.3V
	C9117	1-104-999-11	MYLAR	0.1µF	10%	200V
		CONNECTOR				
*	CN9101	1-564-506-11	PLUG,CONNECTOR 3P			
*	CN9102	1-564-515-11	PLUG,CONNECTOR 12P			
*	CN9103	1-564-506-11	PLUG,CONNECTOR 3P			
*	CN9104	1-770-747-11	CONNECTOR, BOARD TO BOARD 12P			
		DIODE				
	D9101	8-719-924-11	DIODE MTZJ-T-77-22			
	D9102	8-719-924-11	DIODE MTZJ-T-77-22			
	D9103	8-719-404-50	DIODE MA111-TX			
	D9104	8-719-404-50	DIODE MA111-TX			
	D9105	8-719-404-50	DIODE MA111-TX			
	D9106	8-719-404-50	DIODE MA111-TX			
	D9107	8-719-510-02	DIODE D1NS4-TR			
		COIL				
	L9101	1-412-525-31	INDUCTOR	10µH		
		TRANSISTOR				
	Q9101	8-729-045-05	TRANSISTOR 2SA2005			
	Q9102	8-729-045-04	TRANSISTOR 2SC5511			
	Q9103	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q9104	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q9105	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
	Q9106	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q9107	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
	Q9108	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
		RESISTOR				
	R9102	1-249-414-11	CARBON	560	5%	1/4W
	R9103	1-249-432-11	CARBON	18K	5%	1/4W
	R9104	1-249-432-11	CARBON	18K	5%	1/4W
	R9105	1-249-414-11	CARBON	560	5%	1/4W
	R9106	1-249-421-11	CARBON	2.2K	5%	1/4W
	R9107	1-249-421-11	CARBON	2.2K	5%	1/4W

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R9108	1-260-316-51	CARBON	100	5%	1/2W
	R9109	1-249-385-11	CARBON	2.2	5%	1/4W
	R9110	1-249-385-11	CARBON	2.2	5%	1/4W
	R9111	1-249-405-11	CARBON	100	5%	1/4W
	R9112	1-215-915-11	METAL OXIDE	470	5%	3W
	R9113	1-216-017-91	RES-CHIP	47	5%	1/10W
	R9114	1-249-425-11	CARBON	4.7K	5%	1/4W
	R9115	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
	R9117	1-216-047-91	RES-CHIP	820	5%	1/10W
	R9118	1-249-405-11	CARBON	100	5%	1/4W
	R9119	1-249-399-11	CARBON	33	5%	1/4W
	R9120	1-247-807-31	CARBON	100	5%	1/4W
	R9121	1-249-409-11	CARBON	220	5%	1/4W
	R9122	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
	R9123	1-249-401-11	CARBON	47	5%	1/4W
	R9124	1-249-401-11	CARBON	47	5%	1/4W
	R9125	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R9126	1-249-395-11	CARBON	15	5%	1/4W
	R9127	1-216-005-00	RES-CHIP	15	5%	1/10W
	R9128	1-216-295-91	SHORT			

ACCESSORIES AND PACKAGING

	PART NO.	DESCRIPTION
*	4-066-646-02	BAG, PROTECTION
	4-082-506-41	MANUAL, INSTRUCTION
*	4-076-522-02	CUSHION ASSY, UPPER (FRONT)
*	4-076-523-01	CUSHION ASSY, LOWER
*	4-076-526-04	CARTON, INDIVIDUAL

REMOTE COMMANDER

PART NO.	DESCRIPTION
1-476-683-11	REMOTE COMMANDER (RM-Y184)
4-081-888-11	BATTERY COVER FOR (RM-Y184)

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

9-965-912-01

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4-082-506-41

FD Trinitron WEGA™

Televisor Trinitron a Color

XBR

Manual de instrucciones

Lea este manual antes de usar el producto.

KV-38DRC2 KV-38DRC2C

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ADVERTENCIA

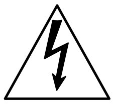
Para reducir el riesgo de incendio o descarga eléctrica, no exponga el televisor a la lluvia o humedad.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

ATTENTION
RISQUE DE CHOC ELECTRIQUE,
NE PAS OUVRIR

PRECAUCION
RIESGO DE CHOQUE ELECTRICO
NO ABRIR

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



Este símbolo señala al usuario la presencia de voltaje peligroso sin aislamiento en el interior del aparato de tal intensidad que podría presentar riesgo de descarga eléctrica.

Este símbolo sirve para indicar al usuario la presencia de instrucciones de operación y mantenimiento en la literatura que acompaña al producto.

PRECAUCIÓN

PARA EVITAR DESCARGAS ELÉCTRICAS, INTRODUZCA EL ENCHUFE EN EL TOMACORRIENTE POR COMPLETO, CON EL CONTACTO ANCHO DEL ENCHUFE EN LA RANURA ANCHA DEL TOMACORRIENTE.

PRECAUCIÓN

Al usar videojuegos, computadoras y productos similares con el televisor, mantenga los ajustes de brillo y contraste a un nivel moderado. Si una imagen inmóvil permanece en la pantalla durante un periodo prolongado con elevada intensidad de brillo o contraste, la imagen podría quedar grabada en la pantalla en forma permanente. Igualmente, ver continuamente el mismo programa de televisión podría dejar grabada en la pantalla el logotipo de la emisora. La garantía no ofrece cobertura para este tipo de problema, ya que se produce como resultado de un uso inadecuado.

Nota sobre Caption Vision

Este televisor permite ver subtítulos, en cumplimiento con lo dispuesto en el inciso 15,119 de las normas de la Comisión Federal de Comunicaciones (FCC) de EE.UU.

Nota sobre la limpieza del televisor

Limpie el televisor con un paño suave y seco. Nunca emplee disolventes, como diluyente de pintura o bencina, ya que pueden dañar el acabado exterior.

Nota para el instalador del sistema de cable

Esta nota tiene el propósito de llamar la atención del instalador del sistema de cable sobre el Artículo 820-40 del NEC, que contiene las normas para la puesta a tierra y, en particular, especifica que la tierra del cable debe conectarse al sistema de tierra del edificio, en el punto más próximo que sea factible a donde entra el cable al edificio.

El empleo de este televisor para fines que no sean la recepción privada de programas transmitidos por UHF, VHF o cable, destinados a uso del público en general, podría requerir autorización de la emisora o compañía de cable, del propietario del programa o de ambos.

NOTIFICACIÓN

Este aparato ha sido debidamente probado, comprobándose que cumple con los límites impuestos a dispositivos digitales Clase B de acuerdo con la Sección 15 de las normas de la FCC. Estos límites se establecieron para ofrecer protección razonable contra interferencias perjudiciales en las instalaciones residenciales. Este aparato genera, usa y puede emitir energía radioeléctrica. De no instalarse y utilizarse de acuerdo con las instrucciones correspondientes, podría producir interferencias perjudiciales en las radiocomunicaciones. No obstante, no puede garantizarse que no se produzcan estas interferencias en una instalación determinada. Si este aparato llega a interferir en la recepción por radio o televisión, lo que podrá comprobarse encendiendo y apagando el aparato, se recomienda al usuario intentar corregir la interferencia mediante una o más de las siguientes medidas:

- ❑ Reoriente o cambie de lugar las antenas receptoras.
- ❑ Aumente la distancia que separa este aparato y el receptor afectado.
- ❑ Enchufe el aparato en una toma de corriente de un circuito distinto al que esté enchufado el receptor afectado.
- ❑ Consulte con el distribuidor o solicite los servicios de un técnico capacitado en radio y televisión.
  Cualquier cambio o modificación que no se detalla expresamente en el presente manual podría invalidar su autorización para emplear este aparato.

Seguridad

- ❑ Use el televisor únicamente con corriente alterna de 120 V
- ❑ Por motivos de seguridad, la clavija entrará en el tomacorriente en una sola posición. Si no puede meter la clavija completamente en el tomacorriente, consulte con su proveedor.
- ❑ Si algún líquido u objeto cae dentro del televisor, desconecte el aparato inmediatamente y llévelo a revisar por personal de servicio técnico especializado antes de volver a utilizarlo.

Instalación

- ❑ Para evitar el sobrecalentamiento interno, no tape las rejillas de ventilación.
- ❑ No instale el televisor en un lugar caliente o húmedo, ni donde quede expuesto a cantidades excesivas de polvo o vibraciones mecánicas.
- ❑ El cable electrico está fijado a la parte posterior del televisor con ganchos. No intente extraer el cable de estos ganchos. Si lo hace, podría dañar el televisor.

TruSurround es una marca comercial de SRS Labs, Inc. SRS y el símbolo SRS son marcas comerciales registradas de SRS Labs, Inc. en los Estados Unidos de América y en países extranjeros seleccionados. SRS y TruSurround están incorporadas bajo licencia de SRS Labs, Inc. y están protegidas bajo los números de patente de los Estados Unidos 4.748.669 y 4.841.572 con varias patentes extranjeras emitidas y pendientes adicionales. La adquisición de este producto no concede el derecho de venta de grabaciones realizadas con la tecnología TruSurround.

BBE y el símbolo de BBE son marcas comerciales de BBE Sound, Inc., usadas bajo licencia de BBE Sound, Inc. conforme a las Patentes Nos. 4,638,258 y 4,482,866 de Estados Unidos.

FD Trinitron y el logotipo de Wega son marcas comerciales de Sony Corporation.

Número de serie

Los números de modelo y serie están situados en la parte frontal de este manual de instrucciones y en la parte posterior del televisor. Refiérase a ellos cuando se commmunique con su proveedor Sony acerca de este producto.

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Normas importantes sobre seguridad

Para su protección, lea detenidamente estas instrucciones y guarde este manual para futuras consultas.

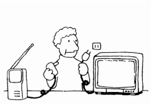
Lea cuidadosamente todas las advertencias y precauciones y siga las instrucciones señaladas en el televisor o descritas en el manual de instrucciones o de reparación.

ADVERTENCIA

Para protegerse contra daños personales, siga las precauciones de seguridad básicas durante la instalación, la utilización y el mantenimiento del televisor indicadas a continuación.

Utilización

Fuentes de alimentación



Este televisor solamente deberá alimentarse con el tipo de fuente de alimentación indicado en la etiqueta de serie / modelo. Si no está seguro sobre el tipo de red eléctrica de su hogar, consulte a su proveedor o a la compañía de suministro eléctrico local. En caso de un televisor diseñado para alimentarse con pilas, consulte su manual de instrucciones.

Conexión a tierra o polarización

Este aparato cuenta con cable eléctrico con clavija polarizada (una cuchilla de la clavija es más ancha que la otra) o con tres terminales (el tercero es para puesta a tierra). Siga las instrucciones indicadas a continuación:

Para un televisor con clavija polarizada

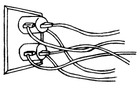
Esta clavija solamente encajará en la toma de alimentación de una sola forma. Ésta es una medida de seguridad. Si no puede insertar completamente la clavija en la toma de alimentación, inviértala. Si la clavija sigue sin poder insertarse, comuníquese con un electricista para que le instale una toma adecuada. No intente contravenir esta medida de seguridad insertando la clavija a fuerza.

Advertencia alternativa

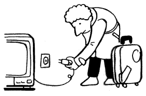
Para un televisor con clavija de tres terminales con conexión a tierra

Esta clavija solamente podrá insertarse en una toma de la red con conexión a tierra. Ésta es una medida de seguridad. Si no puede insertar completamente la clavija en la toma de alimentación, comuníquese con un electricista para que le instale una toma adecuada. Intente contravenir esta medida de seguridad.

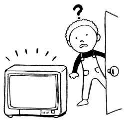
Sobrecarga



No sobrecargue las tomas de alimentación, las extensiones, ni tomacorrientes de derivación sobrepasando su capacidad, porque esto podría resultar en incendios o cortocircuitos.

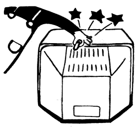


Cuando vaya a dejar el televisor sin usar durante mucho tiempo, desconéctelo de la alimentación como protección contra la posibilidad de un mal funcionamiento interno que pudiese provocar el peligro de incendios.



Si un televisor en funcionamiento emite crujidos o detonaciones continuos o frecuentes, desconéctelo y consulte a su proveedor o a un radiotécnico. Es normal que algunos televisores produzcan estos ruidos, especialmente al conectar o desconectar su alimentación.

Introducción de objetos y líquidos



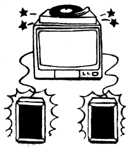
No introduzca objetos de ningún tipo a través de las ranuras del gabinete, ya que podrían tocar puntos de tensión peligrosa o cortocircuitar componentes, lo que podría resultar en incendios o descargas eléctricas. No derrame nunca ningún tipo de líquido sobre el televisor.

Limpieza

Antes de limpiar el televisor, desconéctelo de la alimentación. No utilice limpiadores líquidos ni aerosoles. Para limpiar el exterior del televisor, emplee un paño ligeramente humedecido en agua.

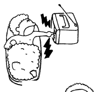
Instalación

Accesorios



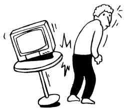
No utilice ningún accesorio no recomendado por el fabricante, ya que podría ser peligroso.

Agua y humedad



No utilice aparatos que requieran de alimentación eléctrica cerca del agua — por ejemplo, cerca de una bañera, un lavabo, un fregadero o una lavadora, en un sótano húmedo, ni cerca de una piscina, etc.

Colocación

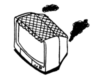


No coloque el televisor sobre una mesita con ruedas, un pedestal, una mesa o un estante inestable. El televisor podría caer, causando daños serios a niños, adultos y al propio televisor. Utilice solamente la mesita de ruedas o soporte recomendado por el fabricante para el modelo específico. Ninguna parte del televisor debe sobresalir por la orilla de la mesita o soporte, ya que esto representa un peligro. La combinación de un televisor y un mueble con ruedas deberá moverse con cuidado. Las paradas repentinas, la fuerza excesiva y las superficies desiguales podrían hacer que se cayese tal combinación.

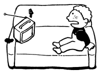
Ventilación

Las ranuras y aberturas en la parte posterior o inferior del televisor son para permitir la ventilación necesaria. Para asegurar la operación fiable del televisor y protegerlo contra el sobrecalentamiento, estas ranuras y aberturas no deberán cubrirse ni obstruirse nunca.

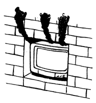
- ❑ Nunca tape las ranuras ni aberturas con paños ni otros materiales.



- ❑ Nunca tape las ranuras ni aberturas colocando el televisor sobre una cama, sofá, alfombra u otras superficies similares.

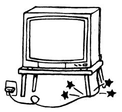


- ❑ No coloque nunca el televisor en un lugar cerrado, como en un librero o un mueble empotrado, a menos que esté adecuadamente ventilado.



- ❑ No coloque el televisor cerca ni sobre un radiador o una salida de aire caliente, ni expuesto a la luz solar directa.

Protección del cable de alimentación



No permita que ningún objeto quede sobre el cable de alimentación, ni coloque el televisor donde el cable pueda quedar sometido a desgaste o presión.

Antenas

Conexión a tierra de la antena exterior

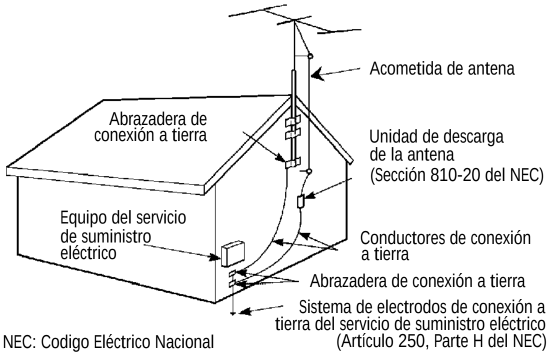
Cuando instale una antena exterior, tenga en cuenta las precauciones siguientes. Un sistema de antena exterior no deberá colocarse cerca de líneas de alta tensión ni otros circuitos de iluminación o alimentación, ni donde pueda entrar en contacto con tales líneas o circuitos.

CUANDO INSTALE UN SISTEMA DE ANTENA EXTERIOR, EXTREME LAS PRECAUCIONES PARA EVITAR QUE ENTRE EN CONTACTO CON TALES LÍNEAS DE ALIMENTACIÓN O CIRCUITOS, YA QUE TAL CONTACTO CASI SIEMPRE RESULTA FATAL.

Cerciórese de que el sistema de antena esté puesto a tierra a fin de que proporcione cierta protección contra sobretensiones y cargas estáticas. La Sección 810 del Código Eléctrico Nacional (NEC) de EE.UU. y la Sección 54 del Código Elétrico Canadiense ofrecen información con respecto a la puesta a tierra adecuada de una unidad de descarga de antena, el tamaño de los conductores de conexión a tierra, la ubicación de la unidad de descarga de la antena, la conexión de los electrodos de conexión a tierra y los requisitos de tales electrodos.

Conexión a tierra de la antena de acuerdo con el Código Eléctrico Nacional

Con respecto a la conexión a tierra de la antena, consulte la Sección 54-300 del Código Eléctrico Canadiense.



Relámpagos

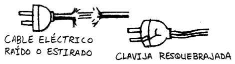
Para evitar daños al televisor debido a un relámpago o a una sobretensión de corriente durante una tormenta o cuando no se encuentre en uso por largos períodos de tiempo, desconecte el cable de la toma de corriente de la pared y desconecte la antena.

Mantenimiento

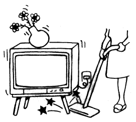
Daños que requieren reparación

Desconecte el televisor de la toma de alimentación y solicite los servicios de personal de reparación calificado en las condiciones siguientes:

- ❑ Cuando el cable o la clavija de alimentación esté dañado.

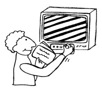


- ❑ Si dentro del televisor se ha derramado líquido.



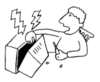
- ❑ Si el televisor ha estado expuesto a la lluvia o al agua.

- ❑ Si el televisor ha recibido un golpe fuerte al caer, o se daña el gabinete.
- ❑ Si el televisor no funciona normalmente al seguir las instrucciones de operación. Ajuste solamente los controles especificados en el manual de instrucciones. El ajuste inadecuado de otros controles podría resultar en daños que podrían requerir la intervención de un técnico calificado a fin de devolver el televisor a su funcionamiento normal.



- ❑ Cuando el rendimiento del televisor haya cambiado notablemente — significará que es necesario repararlo.

Reparación



No intente reparar por sí mismo el aparato, ya que al abrir el gabinete se vería expuesto a tensiones peligrosas y otros riesgos. Solicite los servicios de personal de reparación calificado.

Piezas de repuesto

Cuando se haya requerido el reemplazo de piezas, solicite al técnico de reparación un certificado por escrito de que ha utilizado las piezas de repuesto con las mismas características que las originales, especificadas por el fabricante.

La substitución no autorizada de piezas podría resultar en incendios, descargas eléctricas u otros peligros.

Comprobación de seguridad

Después de haber finalizado cualquier servicio de mantenimiento o reparación, solicite al técnico de reparación que realice y certifique las comprobaciones de seguridad rutinarias (como especifica el fabricante) para determinar si el televisor se encuentra en condiciones de funcionar con seguridad. Cuando finalice la vida útil del televisor, el deshacerse inadecuadamente de él podria provocar la implosión del cinescopio. Solicite este servicio a un técnico calificado.

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Presentación del FD Trinitron Wega

Resumen

En este capítulo, se enumeran las funciones especiales de su televisor Wega y se explica cómo configurar y aprovechar las funciones básicas.

Tema	*Página*
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Funciones especiales del FD Trinitron Wega

El FD Trinitron Wega se caracteriza por su extraordinario contraste, su absoluta precisión y su singular nitidez de imagen, desde un extremo de la pantalla al otro.

Percibirá la superioridad de la tecnología Wega de inmediato. Lo primero que notará es que el cinescopio plano produce un mínimo de reflejos molestos. La tecnología basada en un cinescopio plano mejora la resolución de la imagen sin distorsiones, a diferencia de las pantallas curvas convencionales. El FD Trinitron ofrece un notable detalle de imagen no sólo en el centro de la pantalla, sino también en las esquinas, por lo que permite disfrutar de imágenes nítidas y brillantes desde cualquier lugar de la habitación.

Características especiales

A continuación se describen algunas de las funciones de las que podrá disfrutar con su nuevo televisor:

- **DRC (Creación de realidad digital):** Al contrario que los duplicadores de línea convencionales, la función DRC duplica las líneas verticales y horizontales, proporcionando una densidad cuatro veces mayor para fuentes de gran calidad como videodiscos, receptores satelitales y cámaras digitales de video.
- **Cinemotion:** Brinda una imagen de calidad óptima, detectando automáticamente el contenido de las películas y aplicando un proceso de despliegue 3/2. Las imágenes móviles revistan mayor claridad y naturalidad.
- **Imagen Gemela (Twin View™):** Mediante el uso de un controlador de imágenes múltiples (MIDX), Imagen Gemela permite ver dos programas, uno al lado del otro, con la posibilidad de ampliar una imagen. Es posible ver las imágenes de dos aparatos diferentes simultáneamente.
- **16:9 Realzado:** Tecnología de compresión vertical que permite una máxima resolución de la imagen proveniente de fuentes “anamórficas” o fuentes “realzadas para pantalla panorámica”, incluyendo determinados videodiscos.
- **Modulación de velocidad:** Realce en las líneas verticales que agudiza la definición de la imagen.
- **Autovolumen:** Equilibra los niveles de volumen para proporcionar una salida uniforme entre programas y anuncios publicitarios.
- **Suprimir Canal:** Permite a los padres de familia impedir el acceso a hasta cuatro canales.
- **Entradas para componentes de video:** Ofrece la mejor calidad de video para la conexión de reproductores de videodiscos (480p, 480i) y receptores de señales digitales (HD 1080i).
- **Entradas S VIDEO:** Proporcionan imágenes de alta calidad provenientes de equipos conectados al televisor.
- **Vista preliminar de canales favoritos:** Vea hasta ocho de sus canales predilectos, sin dejar el canal actual.

Contenido de la caja

La caja contiene su nuevo televisor Trinitron, un control remoto y dos pilas AA, o sea, todo lo que necesita para instalar y usar el televisor en su configuración básica.

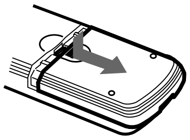
La mayor parte de los aparatos periféricos se surten con los cables que se necesitan para conectarlos al televisor. Si piensa conectar aparatos adicionales a su televisor, posiblemente sea necesario comprar cables o conectores adicionales. Conviene contar con todos los materiales necesarios antes de comenzar una instalación especial.

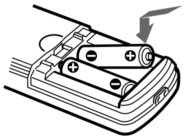
Uso del control remoto

El control remoto es el dispositivo principal para controlar el funcionamiento de su televisor. Úselo con cuidado, sin dejarlo caer ni mojar. No lo deje a la luz solar directa, cerca de un calentador ni en lugares muy húmedos.

Inserción de las pilas

Inserte dos pilas de tamaño AA (R6) (suministradas), asegurándose de que las polaridades + y – marcadas en las pilas correspondan al diagrama ubicado dentro del compartimiento de las pilas.





Cuando el control remoto no vaya a utilizarse durante un período prolongado, quite las pilas para evitar daños provocados por fugas de electrolito.

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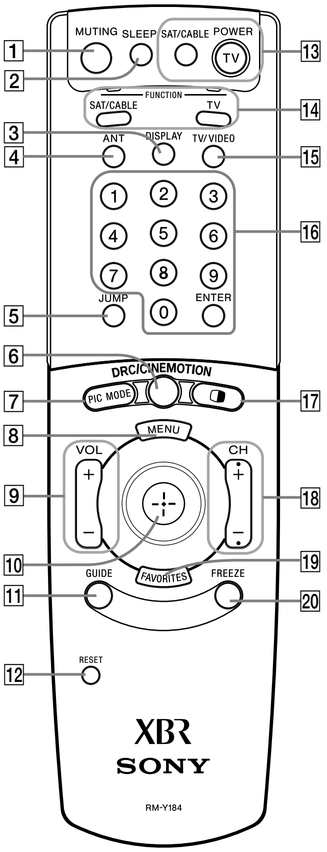
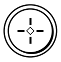
En la siguiente tabla se describen los botones del control remoto correspondientes a las funciones más avanzadas.

Descripción de los botones



Para explorar los canales rápidamente, oprima y mantenga oprimido el botón CH+ o CH–.

	Botón	*Descripción*
1	MUTING	Oprima este botón para suprimir el sonido. Oprímalo de nuevo u oprima VOL + para recuperar el sonido.
2	SLEEP	Oprímalo varias veces hasta que el televisor muestre los minutos (15, 30, 45, 60, o 90) que desee que permanezca encendido antes de que se apague automáticamente. Para cancelar, oprímalo hasta que aparezca SLEEP NO. Con la función SLEEP activada, oprima SLEEP una vez para ver el tiempo restante.
3	DISPLAY	Oprímalo una vez para que aparezca en la pantalla la hora actual, el nombre del canal (si se ha definido) y número del canal. Oprímalo de nuevo para desactivar la indicación. Consulte la pagina 43 para obtener información detallada sobre el ajuste de la hora.
4	ANT	Cambia la entrada de VHF / UHF a la entrada AUX.
5	JUMP	Oprímalo para alternar entre dos canales. El televisor alterna entre el canal actual y el último seleccionado.
6	DRC/ CINEMOTION	Con fuentes de video de alta calidad (p.ej., reproductor de videodiscos, receptor satelital), este botón recorre las diversas modalidades de imagen de alta resolución: Entrelazada, Progresiva, Cinemotion. También se puede ajustar mediante el menú Video. Para mayores detalles, consulte “Selección de opciones de Video” en la página 36.
7	PIC MODE	Oprímalo varias veces para recorrer las modalidades de imagen disponibles: Vívido, Estándar, Película, Pro. También disponibles en el menú Video. Para obtener información detallada, consulte “Selección de opciones de Video” en la página 36.
8	MENU	Oprímalo para ver el menú principal. Oprímalo de nuevo para salir de los menús.
9	VOL +/–	Ajusta el volumen.
10		La perilla control permite desplazar el cursor en pantalla. Al oprimir el centro de la perilla, la opción se selecciona.
11	GUIDE	Muestra la guía de programas de la antena satelital.
12	RESET	Una vez abierto un menú, oprima este botón para restablecer los ajustes de fábrica correspondientes a ese menú.

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	Botón	*Descripción*
13	Botones POWER (VERDES)	Use estos botones para encender y apagar el televisor y los demás aparatos de audio o video para los cuales está programado el control remoto. Para instrucciones al respecto, consulte "Programación del control remoto" en la página 48.
14	Botones FUNCTION	Sirven para seleccionar el aparato (televisor o receptor satelital o cable) que se va a usar. Al oprimirse un botón, la luz se ilumina momentáneamente para indicar cuál aparato recibirá las señales del control remoto.
15	TV/VIDEO	Muestra, uno por uno, los aparatos de video conectados a la entrada para video del televisor: TV, VIDEO 1, VIDEO 2, VIDEO 3, VIDEO 4, VIDEO 5, VIDEO 6.
16	0 – 9 y ENTER	Oprima 0 – 9 para seleccionar un canal. El canal cambia tras 2 segundos. Oprima ENTER para seleccionar de forma inmediata.
17		Activa / desactiva el modo Twin View. Para obtener información detallada, consulte “Uso de Imagen Gemela (Twin View)” en la página 31.
18	CH +/-	Explora los canales.
19	FAVORITES	Muestra la lista de Canales Favoritos. Para mayores detalles, consulte “Uso de Canal Favorito” en la página 30.
20	FREEZE	Congela la imagen secundaria. Oprímalo de nuevo para restaurar la imagen.

(A la siguiente)

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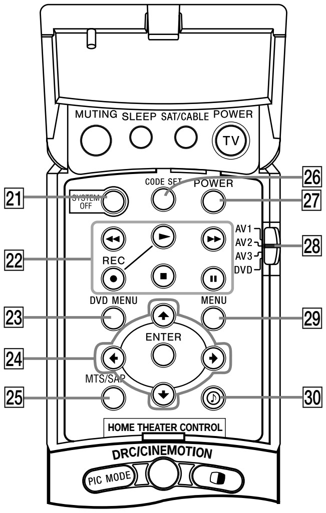


21	SYSTEM OFF	Apaga con un solo pulso todos los aparatos Sony. (Es posible que no tenga el efecto deseado con aparatos antiguos.)
22	CONTROLES PARA VIDEOCASETERA Y VIDEODISCOS	
	◀◀	Rebobinado
	REC	Grabación
	▶▶	Avance rápido
	▶	Reproducción
	■	Detener
	❚❚	Pausa
23	DVD MENU	Muestra el menú DVD.
24	← ↑ ↓ → y ENTER	Sirven para efectuar movimientos y selecciones en el menú en pantalla de los videodiscos.
25	MTS/SAP	Recorre las opciones de múltiples canales de sonido (MTS): Estereofónico, Auto-SAP (segundo programa de audio) y Monofónico. Para mayores detalles, consulte “Uso del menú Audio” en la página 38.
26	CODE SET	Se utiliza para programar el control remoto con el fin de utilizar equipos de video que no sean Sony. Para obtener información detallada, consulte “Programación del control remoto” en la página 48.
27	Boton POWER (VERDE)	Enciende y apaga la videocasetera o reproductor de videodiscos para el cual usted programó el control remoto. Para instrucciones al respecto, consulte “Programación del control remoto” en la página 48.
28	AV1 AV2 AV3 DVD	Utilícelo para cambiar el control del equipo de video conectado. Se puede programar una fuente de video para cada posición del selector (consulte “Programación del control remoto” en la página 48).
29	MENU	Muestra el menú ajustes del DVD.
30	♪	Activa y desactiva Autovolumen. Para mayores detalles, consulte la página 38.

Instalación del televisor

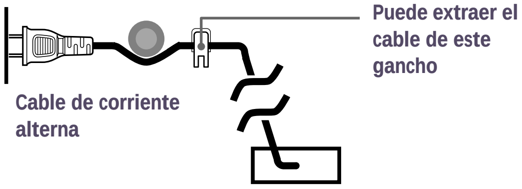
Resumen

En este capítulo se proporcionan instrucciones ilustradas para instalar el televisor:

Tema	*Página*
Controles y conectores del televisor	8
Conexiones básicas (Conexión del sistema de cable o la antena)	10
Conexión de videocasetera y cable	14
Conexión de videocasetera y decodificador	15
Conexión de dos videocaseteras para grabado de cintas	18
Conexión de receptor de satelital	19
Conexión de receptor satelital con videocasetera	20
Conexión de audio receptor	22
Conexión de reproductor de videodiscos con conectores para componentes de video	23
Conexión de reproductor de videodiscos con conectores de audio y video	24
Conexión de receptor de televisión digital	25
Conexión de cámara de video	26
Uso de la función CONTROL S	27
Programación automática del televisor	28

Nota sobre el cable electrico

El cable de corriente alterna se sujeta a la parte posterior del televisor con un gancho. Tenga cuidado al extraer la clavija de su compartimiento. Deslice la clavija con suavidad en sentido ascendente para extraerla del gancho. Una vez extraída, la clavija debe desacoplarse automáticamente del sitio en el que está alojada.



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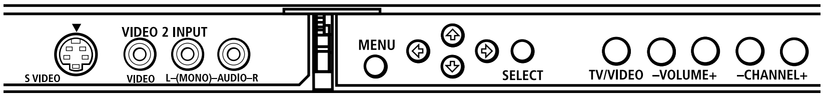
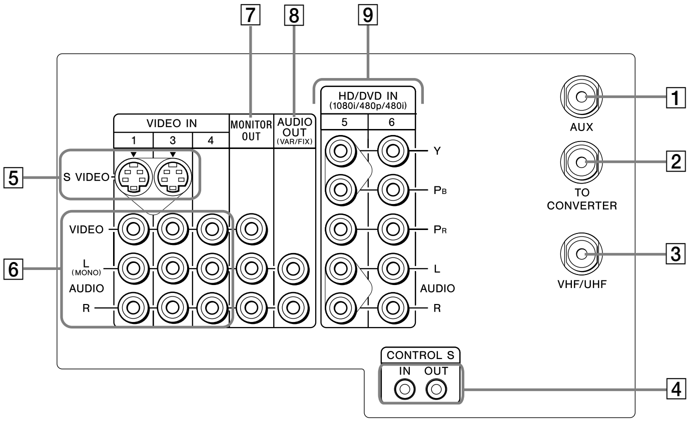
Controles y conectores del televisor

Controles de menú en la parte delantera del televisor

Los controles de menú en la parte delantera del televisor dan acceso a los menús en pantalla sin necesidad de utilizar el control remoto. Los menús en pantalla aparecen al oprimir el botón MENU. Los botones de flecha mueven el cursor por los menús y el botón SELECT permite seleccionar opciones de menú.



Parte posterior del televisor



	Conexión	Descripción
1	AUX	Le permite ver los canales locales y de cable si su servicio de cable no ofrece los canales locales. Puede usted cambiar fácilmente entre los canales locales y los del cable, oprimiendo ANT en el control remoto. Los aparatos conectados a la entrada AUX no podrán verse en la ventanilla derecha de Imagen Gemela.
2	TO CONVERTER	Ésta es una salida de VHF / UHF que le permite programar su televisor para cambiar entre canales codificados (mediante decodificador) y los canales normales de televisión por cable. Use esta salida en lugar de un bifurcador para obtener una mejor calidad de imagen cuando sea necesario cambiar entre canales de cable codificados y decodificados.
3	VHF/UHF	Se conecta a la antena VHF / UHF o cable.

	Conexión	Descripción
4	CONTROL S IN/OUT	Permite al televisior recibir (IN) y enviar (OUT) señales infrarrojas de control remoto a otros equipos Sony de audio o video controlados mediante Control S.
5	S VIDEO	Se conecta con la salida S VIDEO OUT de su videocasetera o de otro aparato de video que cuente con la función S VIDEO. Da una mejor calidad de imagen que las salidas VHF/UHF o la entrada de Video.
6	VIDEO/AUDIO [L (mono)/R]	Se conectan con las salidas de audio y video de su videocasetera o de otro aparato de video. En la parte delantera del televisor, se encuentra una entrada de video (VIDEO 2). Las entradas de Audio y Video dan una mejor calidad de imagen que la entrada VHF/UHF.
7	MONITOR OUT (Salida a monitor)	Permite grabar en videocasetera el programa que esté viendo en el televisor. Si conecta dos videocaseteras, podrá utilizar el televisor como monitor para el montaje de cintas. (no funciona con 480p o 1080i al recibirse en VIDEO 5 o 6.)
8	AUDIO OUT (VAR/FIX) L (MONO)/R [SALIDA DE AUDIO (VAR/FIJO) Izq (MONOFÖNICO)/Der]	Se conecta a las entradas izquierda y derecha de audio del componente de video o de audio.
9	HD/DVD IN (1080i/480i/480p) [ENTRADA DE HD/DVD (1080I/480I/480P)]	Se conecta a las salidas de audio (izquierda, derecha) y de componente de video (Y, P_B, P_R) del reproductor de videodiscos o de su receptor digital.

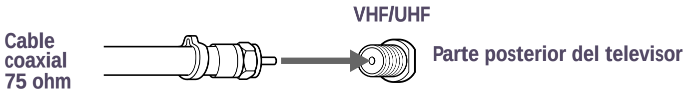
Conexiones básicas (Conexión del sistema de cable o la antena)

Conexión directa a cable o a antena

La conexión que escoja depende del tipo de cable con que cuente su casa.

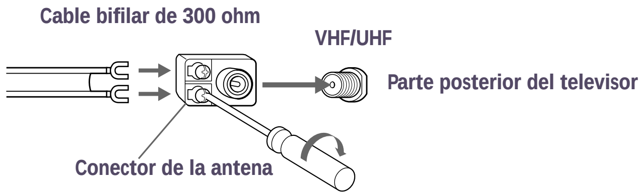
Las casas más nuevas generalmente están equipadas con cable coaxial:

VHF solamente o VHF/UHF o cable



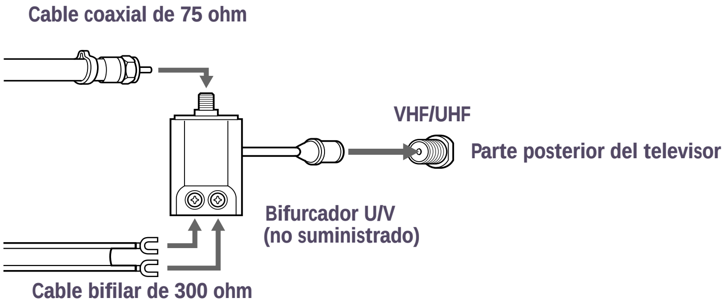
Las casas más viejas pueden tener cable bifilar de 300 ohm:

VHF solamente o UHF solamente o VHF/UHF



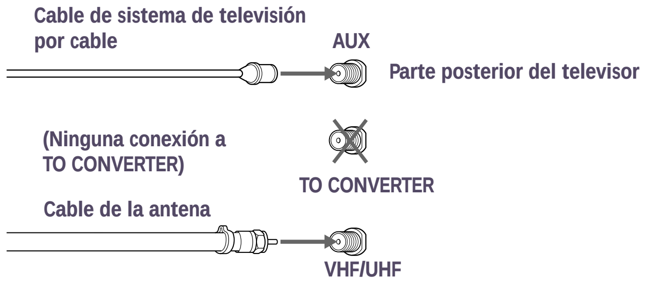
Es posible que algunas casas tengan los dos tipos de cable:

VHF y UHF



Cable y antena

Si su sistema de televisión por cable no incluye canales locales, esta instalación puede resultarle útil.



Active la modalidad de CABLE o antena (ANT) oprimiendo ANT en el control remoto.

Para captar canales mediante la antena en vez del sistema de cable:

1. Seleccione la modalidad de antena, oprimiendo el botón ANT del control remoto.
2. Desactive el cable (consulte la página 40).
3. Lleve a cabo la Autoprogramación (consulte la página 40).

Conexiones básicas del decodificador

Decodificador y cable

Esta es la conexión básica de cable que se prefiere si su compañía de televisión por cable codifica algunos canales, pero no todos (canales de paga y canales normales) y usted necesita utilizar un decodificador.

Con esta conexión usted puede:

- ❑ Usar el control remoto de su televisor para cambiar canales a través del decodificador, cuando la señal se encuentre codificada.
- ❑ Usar el control remoto para cambiar canales a través de su televisor, cuando la señal no se encuentre codificada. (El sintonizador de su televisor proporciona una mejor señal que el decodificador.)
- ❑ Usar la función Imagen Gemela. (Cuando todos los canales pasan a través de su decodificador, sólo una señal es enviada al televisor, lo que le impide disfrutar de la función Imagen Gemela.)
- ❑ Usar la función Imagen Gemela normalmente con la entrada del sistema de televisión por cable.
- ❑ Usar la función Imagen Gemela parcialmente con el decodificador. (Al cambiar el televisor a la entrada AUX –para usar el decodificador– se verá la imagen decodificada proveniente del decodificador. Se podrán ver en la ventanilla izquierda de Imagen Gemela las imágenes tanto de la entrada AUX como de la entrada VHF/UHF, pero en la ventanilla derecha aparecerá sólo la imagen proveniente de la entrada VHF/UHF.)

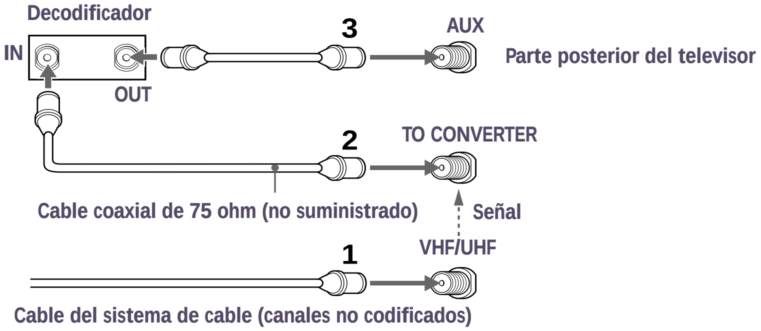
(A la siguiente)

Para que su televisor reciba señales tanto de un decodificador como de una conexión directa al sistema de televisión por cable:

1 Conecte el cable del servicio de televisión por de cable a la entrada VHF/UHF de su televisor.

2 Usando un cable coaxial, conecte la salida de su televisor que dice TO CONVERTER [al convertidor] con la entrada IN en su decodificador. El convertidor interno de su televisor le permite cambiar entre señales no codificadas que entren directamente al televisor y las señales codificadas que entren a través del decodificador. Esto elimina la necesidad de un bifurcador externo.

3 Usando un cable coaxial, conecte la salida OUT del decodificador con la entrada AUX del televisor.



Para cambiar entre los canales del decodificador y los que llegan directamente del cable al televisor:

❑ Oprima el botón ANT del control remoto.

Para usar el control remoto del televisor con el fin de cambiar los canales del decodificador:

❑ Programe el control remoto según sea necesario. (Consulte “Programación del control remoto”, en la página 48.)

Para ver los canales de cable a través del decodificador:

❑ Ponga el televisor en el canal 3 ó 4 (según el caso) y luego utilice el decodificador para cambiar los canales.

Para evitar que se cambie el canal del televisor sin querer:

❑ Al usar una videocasetera o el decodificador, se necesita que el televisor siempre esté puesto en el mismo canal. Se puede aprovechar la función Fijar Canal con este fin. Fijar Canal es una opción del menú Canal. (Consulte “Uso del menú Canal”, en la página 40.)

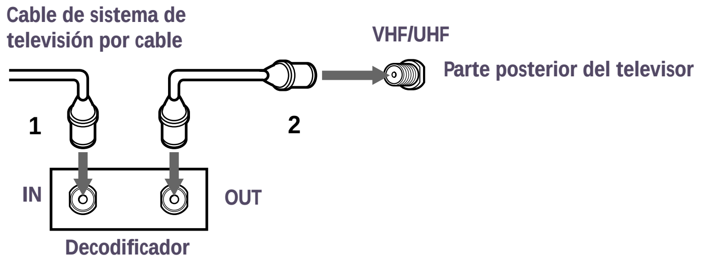
Unicamente decodificador

Use esta conexión si:

- ❑ Está suscrito a un sistema de televisión por cable con señales codificadas, que requieren un decodificador para poder ver todos los canales, y
- ❑ No tiene pensado conectar otro equipo de audio o video a su televisor.

Cuando todos los canales pasan a través de su decodificador, se envía un solo canal decodificado al televisor, lo que le impide utilizar la función Imagen Gemela. Si sólo algunos de sus canales se encuentran codificados, posiblemente prefiera la instalación descrita en la página 12.

1. Conecte el conector coaxial del servicio de cable a la entrada IN del decodificador.
2. Con un cable coaxial, conecte la salida OUT del decodificador a la entrada VHF/UHF del televisor.



Para ver los canales de cable a través del decodificador:

- ❑ Ponga el televisor en el canal 3 ó 4 (según el caso) y luego utilice el decodificador para cambiar los canales.

Para usar el control remoto del televisor con el fin de cambiar los canales del decodificador:

- ❑ Programe el control remoto según sea necesario. (Consulte “Programación del control remoto”, en la página 48.)

Para evitar que se cambie el canal del televisor sin querer:

- ❑ Se puede aprovechar la función Fijar Canal con este fin. Fijar Canal es una opción del menú Canal. (Consulte “Uso del menú Canal”, en la página 40.)

Conexión de videocasetera y cable

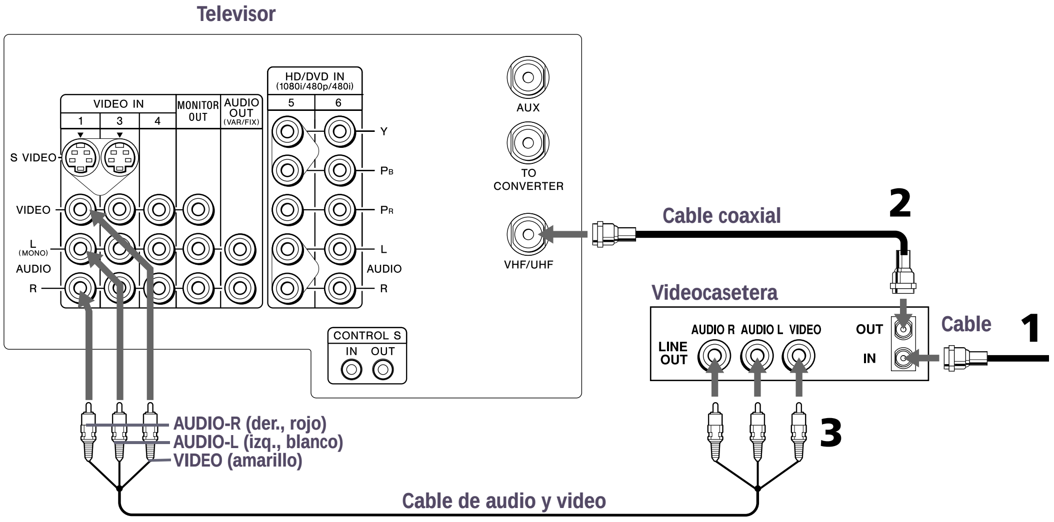
Use esta conexión si recibe servicio de televisión por cable que no requiere decodificador:

1 Conecte el cable del sistema de televisión por cable a la entrada (IN) de la videocasetera.

2 Con un cable coaxial, conecte la salida (OUT) de la videocasetera a la entrada VHF / UHF del televisor.

3 Con un cable de audio y video, conecte las salidas Audio y Video OUT de la videocasetera a las entradas Audio y Video IN del televisor.

> ✍ Si su videocasetera cuenta con conectores de S VIDEO, se puede usar un cable de S VIDEO para lograr mejor calidad de imagen que la que ofrece el cable amarillo de video de un cable combinado de audio y video. Ya que un cable de S VIDEO lleva sólo la señal de video, seguirán siendo necesarios los cables de audio, para contar con sonido.



Conexión de videocasetera y decodificador

Use esta es la conexión si:

- Su compañía de televisión por cable codifica algunos canales (canales de paga), mas no todos (canales normales) y usted necesita utilizar un decodificador, y
- Quiere disfrutar de la función Imagen Gemela.

Con esta conexión usted puede:

- Usar el control remoto de su televisor para cambiar canales a través del decodificador, cuando la señal se encuentre codificada.
- Usar el control remoto para cambiar canales a través de su televisor, cuando la señal no se encuentre codificada. El sintonizador de su televisor proporciona una mejor señal que el decodificador.
- Usar la función Imagen Gemela.
- Grabar tanto canales normales de televisión por cable como canales codificados.

Para conectar un decodificador y una videocasetera, se necesitarán:

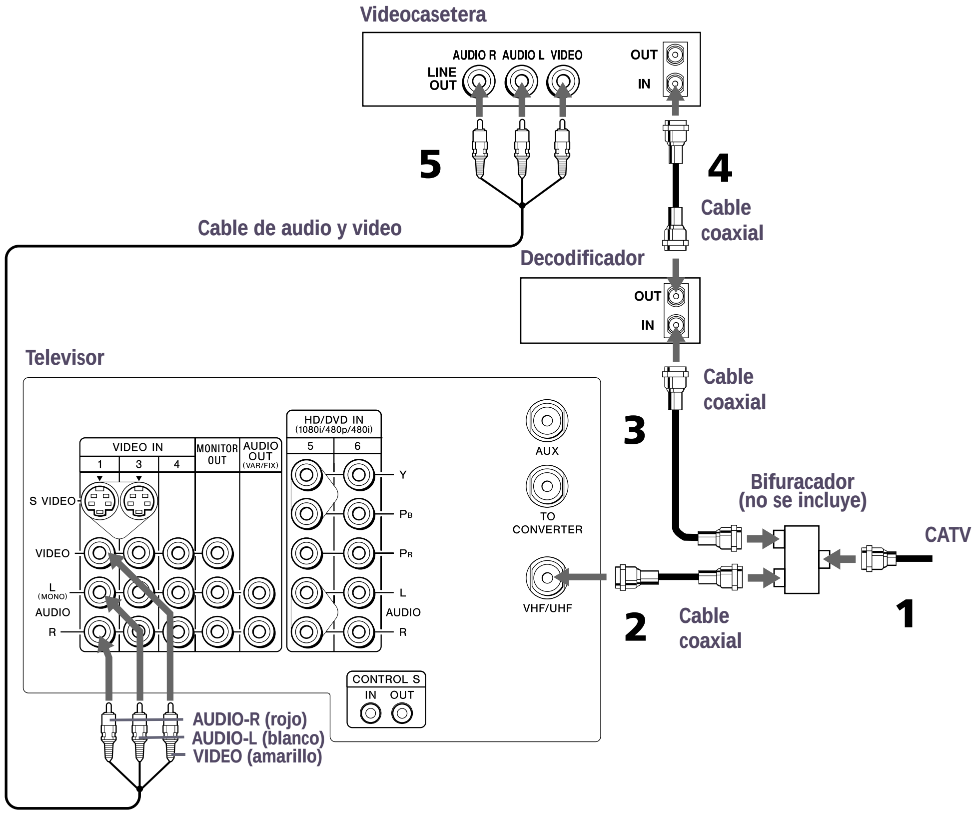
- Un pequeño dispositivo, de costo módico, denominado bifurcador.
- Tres cables coaxiales.
- Un cable combinado para audio y video o un cable S VIDEO y cables de audio.

1. Conecte el cable del sistema de televisión por cable a la entrada única del bifurcador.
2. Utilice un cable coaxial para conectar una de las dos salidas del bifurcador con la entrada para VHF/UHF del televisor.
3. Utilice un cable coaxial para conectar la otra salida del bifurcador con la entrada del decodificador.
4. Utilice un cable coaxial para conectar la salida del decodificador a la entrada de la videocasetera.
5. Utilice el cable de video (amarillo) de un cable combinado de audio y video para conectar la salida de video de la videocasetera con la entrada de video del televisor.

> ✍ Si la videocasetera cuenta con conectores de S VIDEO, se puede usar un cable de S VIDEO en vez del cable de video que forma parte de un cable combinado para audio y video. El cable S VIDEO brindará una señal de video de mejor calidad. Ya que un cable de S VIDEO lleva sólo la señal de video, seguirán siendo necesarios los cables de audio, para contar con sonido.

Conecte los canales de salida de audio izquierdo (blanco) y derecho (rojo) de la videocasetera con los respectivos canales de entrada del televisor.

(A la siguiente)



Para cambiar entre los canales del decodificador y los que llegan directamente del cable al televisor:

❑ Oprima el botón TV/VIDEO del control remoto.

Para ver los canales de cable a través del decodificador:

❑ Ponga el televisor en el canal 3 ó 4 (según el caso) y luego utilice el decodificador para cambiar los canales.

Para usar el control remoto del televisor con el fin de cambiar los canales del decodificador:

❑ Programe el control remoto según sea necesario. (Consulte “Programación del control remoto”, en la página 48.) Entonces utilice el control remoto para cambiar los canales del decodificador.

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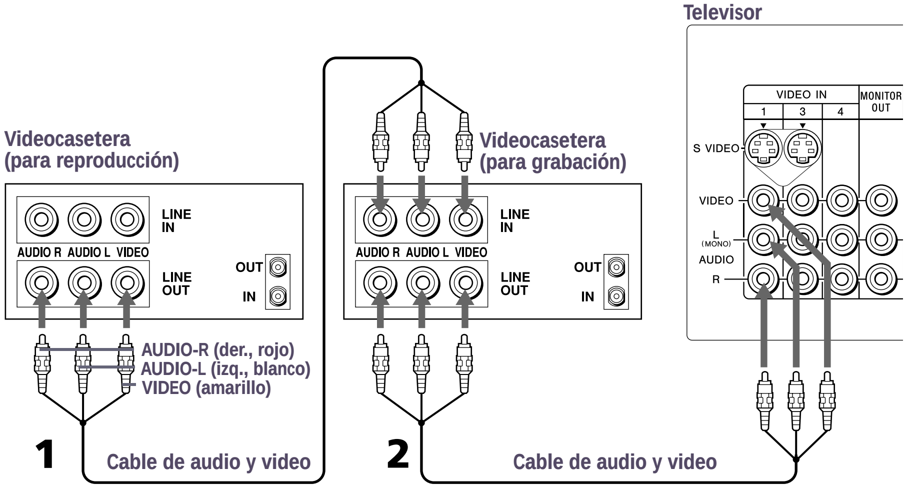
Para usar Imagen Gemela con el decodificador

- ❑ Encienda la videocasetera. (El sintonizador de la videocasetera servirá como una de las fuentes de imágenes para Imagen Gemela. Si no se enciende la videocasetera, no funcionará Imagen Gemela.) Utilice el botón TV/VIDEO del control remoto para cambiar la salida de Imagen Gemela a VIDEO 1. Cambie el canal correspondiente a una de las imágenes mediante el decodificador.

Conexión de dos videocaseteras para grabado de cintas

Si conecta dos videocaseteras entre sí antes de conectarlos al televisor, podrá cambiar entre una y la otra para tener la seguridad que lo que está pasando en una está grabándose en la otra (según se muestra abajo).

1. Con un cable de audio y video, conecte las salidas Audio y Video OUT de la videocasetera reproductora con las entradas Audio y Video IN de la videocasetera en que se va a efectuar la grabación.
2. Con un cable de audio y video, conecte las salidas Audio y Video OUT de la videocasetera que se usará para grabar con las entradas Audio y Video IN del televisor.



Cambiar la entrada de video de la videocasetera

- ❑ Consulte las instrucciones que aparecen en el manual de la videocasetera.

Para ver lo que se está grabando

- ❑ Utilice el control remoto para cambiar el televisor a la entrada de video a la cual está conectada la videocasetera (VIDEO 1 en el caso del dibujo anterior).

✍ Si las dos videocaseteras cuentan con conectores de S VIDEO, se pueden usar cables de S VIDEO para lograr mayor calidad de imagen que la que ofrece un cable combinado para audio y video. Ya que los cables de S VIDEO llevan sólo la señal de video, seguirán siendo necesarios cables de audio, para contar con sonido.

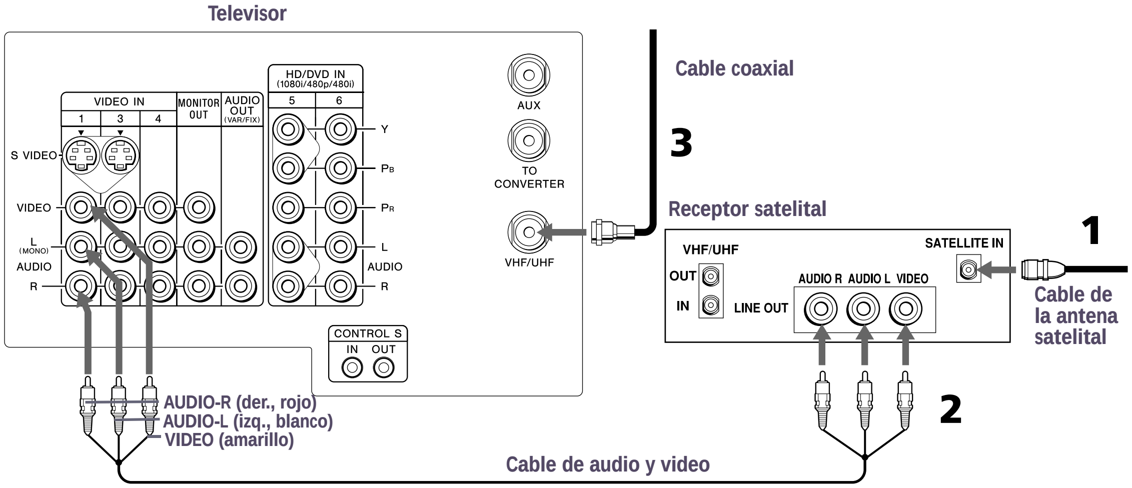
Conexión de receptor de satelital

1 Conecte el cable de la antena de satelital a la entrada SATELLITE IN del receptor satelital.

2 Con un cable de audio y video, conecte las salidas Audio y Video OUT del receptor satelital a las entradas Audio y Video IN del televisor.

3 Conecte un cable coaxial de su sistema de cable o antena a la entrada VHF/UHF del televisor.

> ✍ Si el receptor cuenta con conectores de S VIDEO, se puede usar un cable de S VIDEO para lograr mayor calidad de imagen que la que ofrece un cable combinado para audio y video. Ya que los cables de S VIDEO llevan sólo la señal de video, seguirán siendo necesarios cables de audio, para contar con sonido.



Conexión de receptor satelital con videocasetera

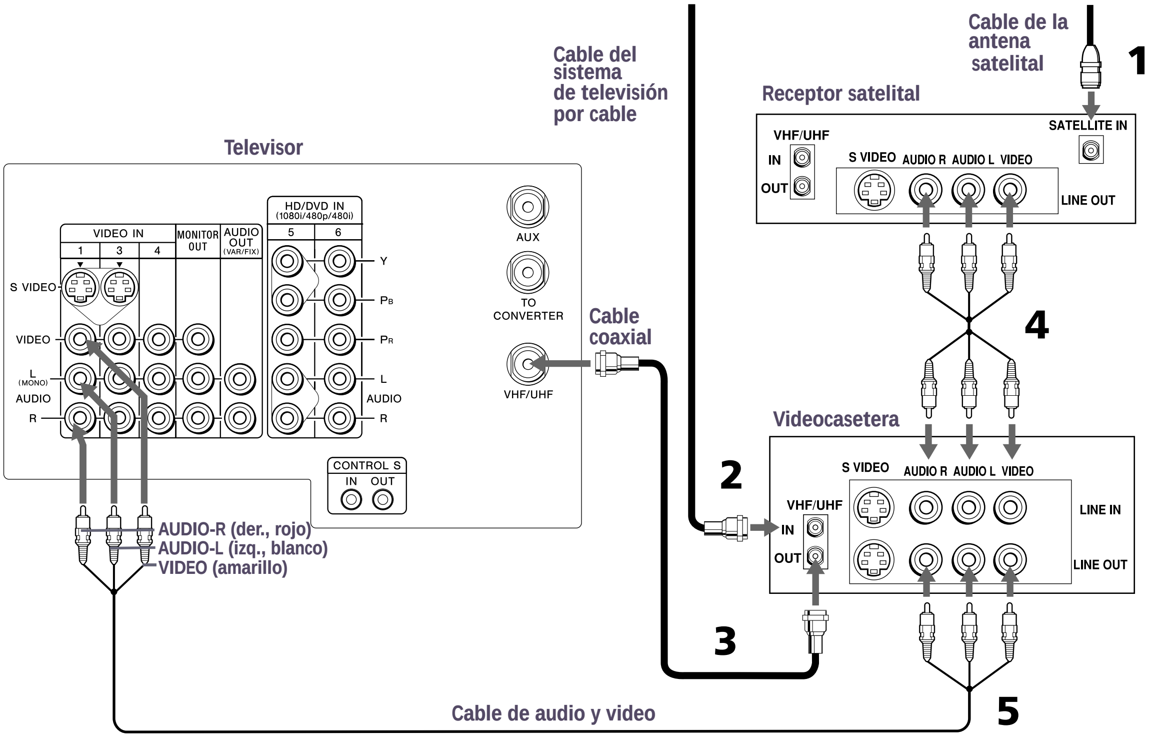
1 Conecte el cable de la antena satelital a la entrada SATELLITE IN del receptor satelital.

2 Conecte el cable del sistema de televisión por cable a la entrada VHF/UHF IN de la videocasetera.

3 Con un cable coaxial, conecte la salida (OUT) de la videocasetera a la entrada VHF/UHF del televisor.

4 Con un cable de audio y video, conecte las salidas Audio y Video OUT del receptor satelital a las entradas Audio y Video IN de la videocasetera.

5 Con un cable de audio y video, conecte las salidas Audio y Video OUT de la videocasetera a las entradas Audio y Video IN del televisor.



Si los aparatos que va a conectar al televisor cuentan con conectores de S VIDEO, se pueden usar cables de S VIDEO para lograr mayor calidad de imagen que la que ofrece un cable combinado para audio y video. Ya que los cables de S VIDEO llevan sólo la señal de video, seguirán siendo necesarios cables de audio, para contar con sonido.

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6 De ser necesario, cambie la entrada de video de la videocasetera. (Consulte las instrucciones que aparecen en el manual de la videocasetera.)

Para ver la televisión por satélite o la videocasetera

❑ Oprima el botón TV/VIDEO del control remoto para escoger una fuente de video.

Para ver la televisión por cable

❑ Oprima el botón TV/VIDEO del control remoto para seleccionar VHF/UHF (a fin de que la señal del cable entre al televisor).

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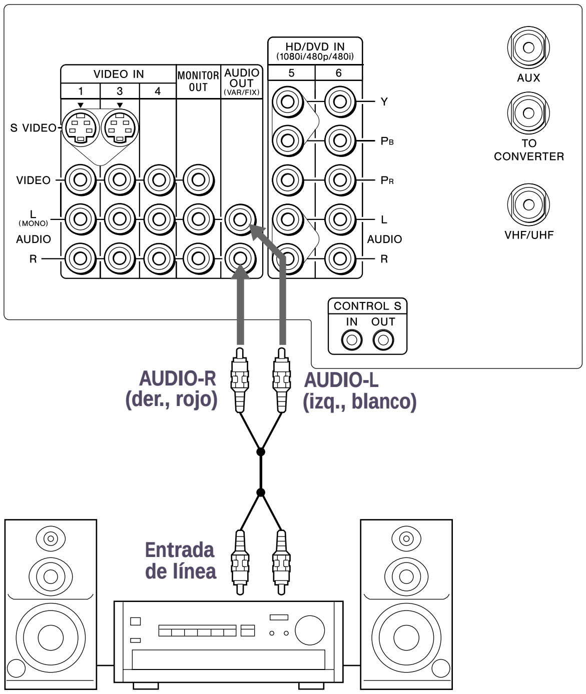
Conexión de audio receptor

Para mayor calidad de sonido, posiblemente desee pasar las señales de audio del televisor a su estéreo.

Para conectar un audio receptor

❑ Use cables de audio para conectar las salidas Audio OUT del televisor a las entradas LINE IN del audio receptor.

Televisor



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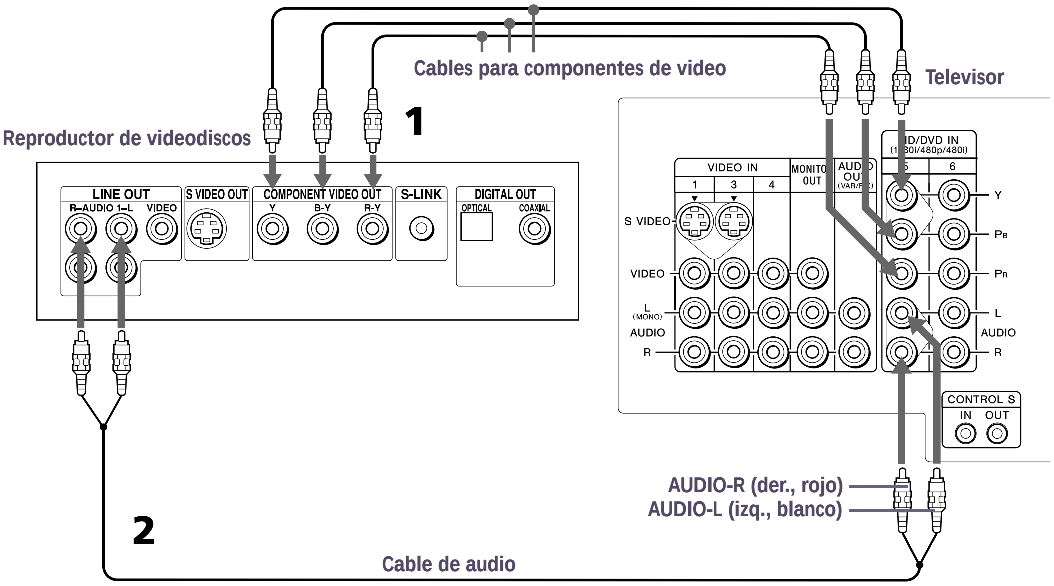
Conexión de reproductor de videodiscos con conectores para componentes de video

Esta es la conexión preferida si su reproductor de videodiscos tiene entradas para componentes (Y, PB, PR).

1 Con tres cables de video de componente independientes, conecte las salidas Y, PB y PR del reproductor de videodiscos a las entradas Y, PB y PR del televisor. Use las conexiones HD / DVD IN 5 ó 6.

> ✍ Las salidas Y, PB y PR de algunos reproductores de videodiscos se designan Y, CB y CR, o Y, B-Y y R-Y. En este caso, conecte los cables a los conectores que presenten los mismos colores.

2 Con un cable de audio, conecte las salidas (OUT) de audio del reproductor de videodiscos a las entradas (IN) de audio del televisor. Asegúrese de usar la misma hilera de entradas que utilizó para la conexión de video (HD / DVD IN 5 ó 6).



> ✍ No se pueden usar las salidas MONITOR OUT para grabar la señal proveniente de un aparato conectado a las entradas Y, PB, PR.

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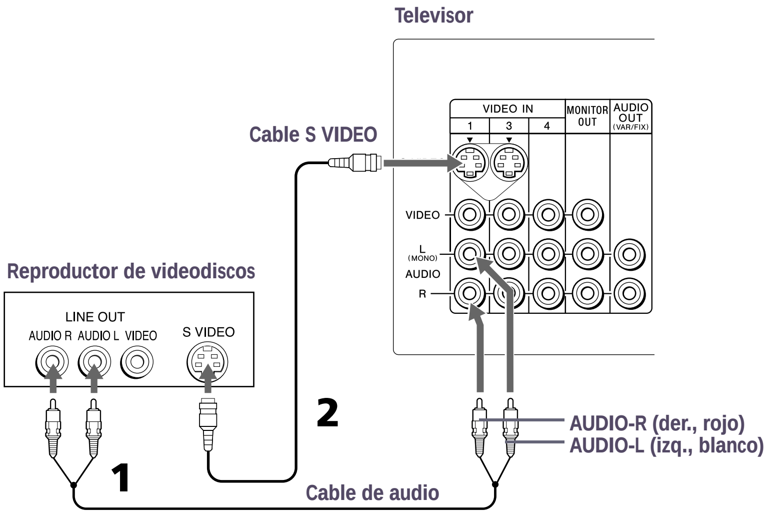
Conexión de reproductor de videodiscos con conectores de audio y video

Esta es la conexión preferida si su reproductor de videodiscos no tiene entradas para componentes (Y, PB, PR).

✍ Una conexión mediante S VIDEO resultará en una señal de video de buena calidad, pero si su reproductor de videodiscos cuenta con salidas para componentes de video, éstas producirán una señal aun mejor (mediante la conexión descrita en la página anterior).

1 Con cables de audio, conecte las salidas (OUT) de audio del reproductor de videodiscos a las entradas (IN) de audio del televisor.

2 Con un cable S VIDEO, conecte la salida S VIDEO del reproductor de videodiscos a la entrada S VIDEO del televisor.



Para cambiar entre el televisor y el reproductor de videodiscos

❑ Utilice el botón TV/VIDEO del control remoto para cambiar de un aparato de entrada a otro.

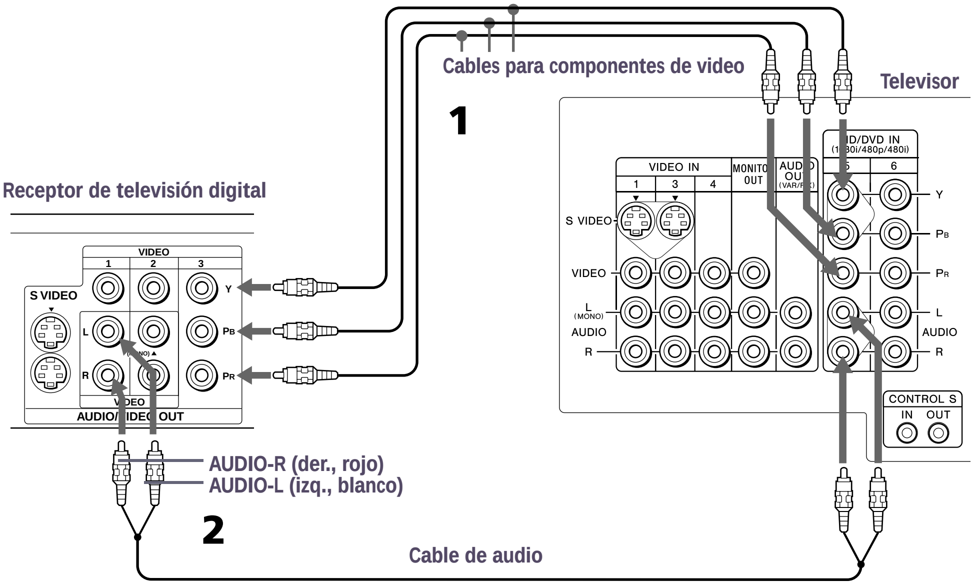
Conexión de receptor de televisión digital

No olvide leer el manual del receptor de televisión digital.

1 Con tres cables de video de componente independientes, conecte al televisor las salidas Y, PB y PR del receptor de televisión digital.

> Si prefiere, puede utilizar un cable de S VIDEO en lugar de los conectores Y, PB y PR. Los conectores Y, PB y PR brindarán la mejor calidad de imagen, pero no se pueden grabar las señales recibidas mediante entradas de Y, PB y PR.

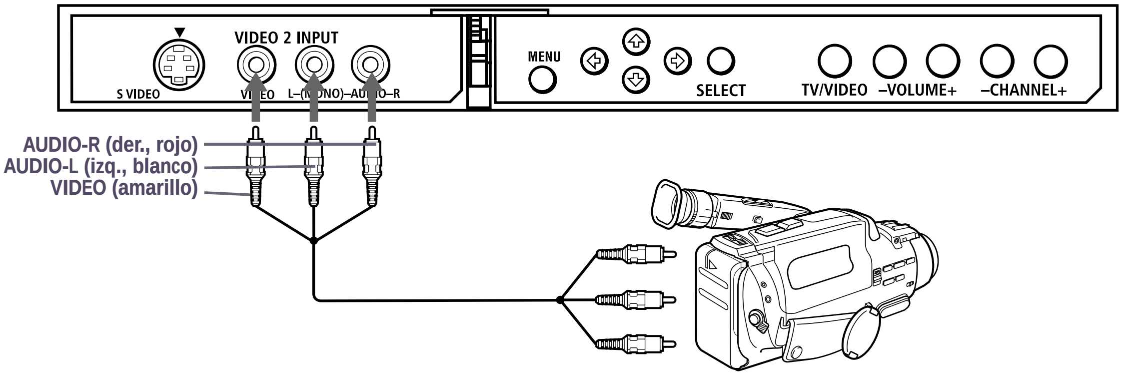
2 Con un cable de audio, conecte las salidas (OUT) de audio del receptor de televisión digital a las entradas (IN) de audio del televisor.



Conexión de cámara de video

Para facilitar la conexión de la cámara de video, la parte delantera del televisor cuenta con entradas para audio y video (según se muestra abajo). Sin embargo, si prefiere, puede conectar la cámara a las entradas AUDIO y VIDEO IN en la parte posterior del televisor.

1 Con cables de audio y video, conecte las salidas Audio y Video OUT de la cámara de video a las entradas Audio y Video IN del televisor.



Salida de audio y video

Si tiene cámara de video monofónica, conecte la salida de audio de la cámara a la entrada AUDIO-L (izquierda) del televisor.

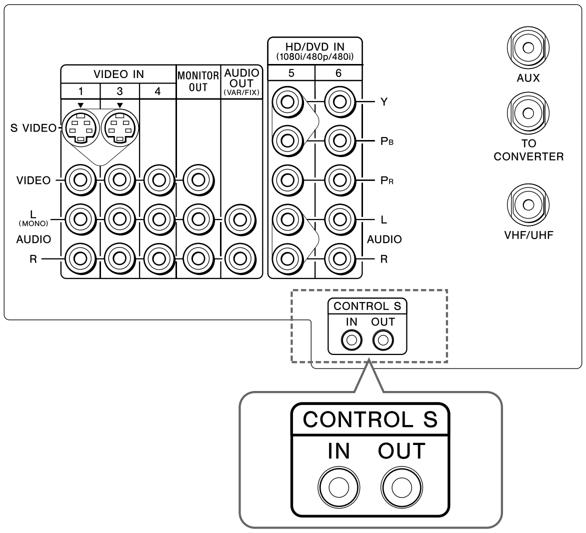
> ✍ Si la cámara cuenta con salida de S VIDEO, se puede usar un cable de S VIDEO para lograr mayor calidad de imagen que la que ofrece un cable combinado para audio y video. Ya que los cables de S VIDEO llevan sólo la señal de video, seguirán siendo necesarios cables de audio, para contar con sonido.

Para ver la salida de la cámara

❑ Use el botón TV / VIDEO en la cara del televisor (o en el control remoto) para cambiar el televisor a la entrada de video a la cual está conectada la videocámara (VIDEO 2 en el dibujo anterior).

Uso de la función CONTROL S

CONTROL S permite controlar el sistema de televisión y otros aparatos Sony (p.ej. reproductor de videodiscos o videocasetera) con un solo control remoto del televisor. Además de no tener que usar varios controles remotos, con CONTROL S podrá apuntar el control remoto siempre al televisor, en vez de tener que apuntarlo a veces a los demás aparatos, los que ahora podrán quedar ocultos o fuera del alcance del control remoto.



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Programación automática del televisor

Una vez conectado el televisor, se debe usar la función de Autoajustes para identificar los canales que se sintonizarán. Al encender su televisor por primera vez después de instalarlo, aparecerá la pantalla de ajustes automáticos. Si no desea seleccionar los canales en ese momento, podrá programarlos posteriormente a través de la función de Autoprogramación que aparece en el menú Canal (consulte la página 40).

> ✍ No se usa la función de Autoajustes en las instalaciones que utilizan un decodificador para la selección de todos los canales.

Uso de Autoajustes

1. Encienda el televisor.
2. Oprima el botón TV FUNCTION del control remoto.
3. Oprima CH+ para iniciar Autoajustes.
4. Una vez terminado Autoajustes, oprima CH– para salir.

Para restablecer los ajustes de fábrica

Para restablecer los ajustes de fábrica

1. Encienda el televisor.
2. Mantenga oprimido el botón RESET del control remoto.
3. Oprima y suelte el botón POWER (encendido) en el televisor. (El televisor se apagará y luego volverá a encenderse.)
4. Suelte el botón RESET.

Uso de las funciones especiales

Resumen

En este capítulo se describe cómo utilizar las funciones nuevas del televisor:

Tema	*Página*
Uso de Canal Favorito	30
Uso de Imagen Gemela (Twin View)	31
Uso de Congelación	34

Uso de Canal Favorito

La función Canal Favorito permite seleccionar programas de una lista de canales favoritos definida por usted.

Para ver la lista de canales favoritos:

1 Si no lo ha hecho ya, defina su lista de canales favoritos. (Vea la descripción de Canal Favorito bajo el encabezado “Selección de opciones de Canal”, en la página 40.)

2 Oprima el botón FAVORITES del control remoto.

3 Mueva la perilla control hacia arriba (↑) o hacia abajo (↓) para hacer resaltar el canal que desee ver. El programa en ese canal aparecerá en la ventanilla de la vista preliminar.

4 Oprima ⊕ para seleccionarlo.

Uso de Imagen Gemela (Twin View)

Imágenes — de la antena, una videocasetera, un videodisco, etc.— simultáneamente. (Sin embargo, se oye el sonido correspondiente a sólo una de las imágenes, la que usted prefiera.) Se puede cambiar el tamaño relativo de cada imagen.

Visualización de Imagen Gemela

Para ver imágenes gemelas

1 Oprima el botón ◑ del control remoto. (Aparece una ventanilla con la segunda imagen.)

2 Para cancelar Imagen Gemela

- ❑ Oprima el botón ◑
  u
- ❑ Oprima el botón ⊕.

Activación de la imagen

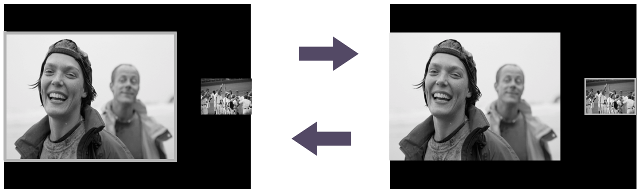
Aunque aparecen dos imágenes en pantalla simultáneamente, sólo una de la caja azul es activa. Respecto a la imagen activa, se puede:

- ❑ Cambiar de canal.
- ❑ Ajustar el volumen.
- ❑ Cambiar las fuentes de entrada de VHF / UHF a cable, oprimiendo TV/VIDEO para cambiar la entrada de video.
- ❑ Cambiar las dimensiones de la imagen, utilizando la perilla control (↑/↓).

Al activarse Imagen Gemela, por lo general, las dimensiones de las imágenes serán las mismas que la última vez que estuvo activa. Sin embargo, tratándose de una imagen 16:9, esa proporción cambia a 4:3 en la ventanilla de la imagen secundaria.

Para activar la imagen derecha

- ❑ Mueva la perilla control a la derecha (ya no lo oprima).



Para activar la imagen izquierda

- ❑ Mueva la perilla control a la izquierda (ya no lo oprima).

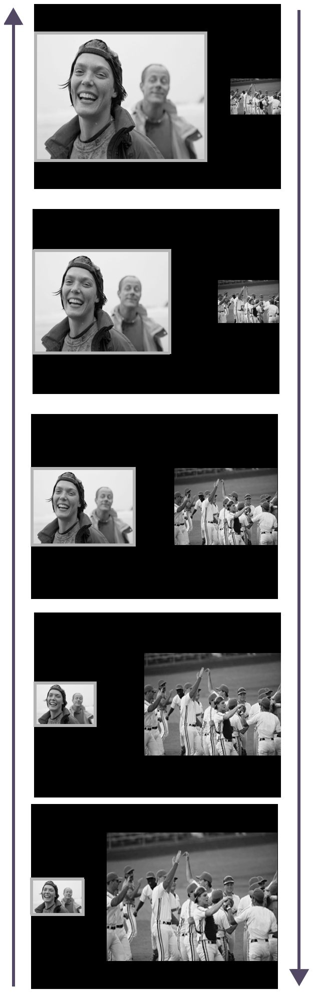
Al usar Imagen Gemela, tenga en cuenta que:

- ❑ Un aparato conectado a las entradas AUX y HD / DVD IN (números 5 y 6) no podrá verse en la ventanilla derecha de Imagen Gemela.

Cambio del tamaño de la imagen

La función de acercamiento permite cambiar el tamaño relativo de las imágenes izquierda y derecha.

1 Activar la imagen izquierda (si aún no está activada).
2 Oprima la perilla control hacia arriba ↑ para ampliar la imagen.
3 Oprima la perilla control hacia abajo ↓ para reducir la imagen.



Al ajustar el tamaño de las pantallas gemelas, el televisor memoriza el cambio. La próxima vez que utilice la función Imagen Gemela, aparecerán los tamaños memorizados.

Uso de Congelación

El botón FREEZE permite capturar temporalmente la imagen de un programa. Puede utilizar esta función para anotar información, como números de teléfono, recetas de cocina, etc.

Funcionará la congelación de la imagen únicamente con la imagen normal. No funcionará si Imagen Gemela está activada.

Para “congelar” la imagen

1 Cuando aparezca la información que desee capturar, oprima el botón FREEZE.

2 El televisor cambia a Imagen Gemela y muestra la imagen “congelada” a la derecha, mientras el programa actual continúa a la izquierda.

3 Para cancelar y volver a la imagen normal, oprima el botón FREEZE.

Uso de los menús

Resumen

Para abrir y escoger un menú:

1. Oprima MENU para que aparezca la pantalla del menú.
2. Mueva la perilla control para llegar al icono deseado en el menú. Oprima para seleccionarlo.
3. Use la perilla control para desplazarse a través de las diversas funciones.
4. Vea la página correspondiente a cada menú para mayores instrucciones sobre cómo desplazarse.

El menú proporciona acceso a las siguientes funciones:

Icono de menú	Descripción	Página
	VIDEO le permite realizar ajustes a la imagen. También permite personalizar la imagen de acuerdo con el tipo de programa que esté viendo.	36
	AUDIO ofrece opciones avanzadas de audio, como escuchar un segundo programa de sonido (SAP) o personalizar el efecto del sonido del televisor.	38
	CANAL permite configurar una lista de canales favoritos, ejecutar la función Autoprogramación, etc.	40
	PATERNO le permite impedir que se capten hasta cuatro canales.	42
	RELOJ le permite poner a la hora el reloj interno del televisor y programar por adelantado el televisor a fin de ver determinados programas.	43
	ADJUSTES ofrece varias opciones para programar canales, identificar las entradas de video y seleccionar el idioma de los menús en pantalla.	44

Para dar por terminada una sesión de menú:

Oprima el botón MENU nuevamente.

Para terminar una sesión de menú y pasar a otra:

Oprima la perilla control hacia arriba para regresar a los iconos de los menús.
Mueva la perilla control para escoger el siguiente icono del menú.
Oprima para seleccionarlo.

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Uso del menú Video

Para seleccionar el menú Video

1. Oprima MENU.
2. Use la perilla control para pasar al icono de video y oprima .
3. Use la perilla control para desplazarse a través de las diversas funciones.
4. Oprima para seleccionar una función. Aparecerá el ajuste correspondiente a la función.
5. Use la perilla control para efectuar los ajustes deseados.
6. Oprima para seleccionar o aceptar el ajuste.
7. Oprima MENU para salir de la pantalla del menú.

Para restablecer los ajustes originales de fábrica para Imagen, Brillo, Color, Tinte, Nitidez, Calidez y Modulacion de Velocidad

- ❑ Oprima RESET en el control remoto cuando se encuentre en el menú Video.

Selección de opciones de Video

Para cambiar rápida y fácilmente de una modalidad de video a otra, use el botón PICTURE MODE del control remoto.

El menú Video incluye las siguientes opciones.

Opción	Descripción	
Modo *Selección del tipo de imagen*	Vívido	Seleccione este modo para aumentar el contraste y la nitidez de la imagen.
	Estándar	Seleccione este modo para ajustes de imagen normal.
	Película	Seleccione este modo para obtener una imagen tenue, ideal para películas.
	Pro	Seleccione este modo para obtener imagen de apariencia profesional natural.
	Se puede modificar los ajustes del menú Video (Contraste, Brillo, Color, etc.) para cada modo.	
Contraste	Ajuste para aumentar el contraste de la imagen y profundizar el color, o bien para reducir el contraste y atenuar el color.	
Brillo	Ajuste para aumentar o disminuir el brillo de la imagen.	
Color	Ajuste para aumentar o disminuir la intensidad del color.	
Tinte	Ajuste para aumentar o disminuir los tonos verdes.	

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Opción	***Descripción***	
Nitidez	Ajuste para aumentar la nitidez de la imagen o para suavizarla.	
Calidez *Ajuste de la intensidad del blanco*	Elija la temperatura del color que desee:	
	Frío	Seleccione para dar un tono azulado a los colores blancos.
	Neutro	Seleccione para dar un tono neutro a los colores blancos.
	Cálido	Seleccione para dar un tono rojizo a los colores blancos (estándar NTSC).
MV *Modulaciôn de la velocidad*	Agudiza la definición de la imagen para que cada objeto adquiera un borde perfilado. Seleccione Alta, Media, Baja, No.	
DRC modo *Digital Reality Creation mode* (Creación de realidad digital)	Crea una imagen de alta resolución con una densidad de 4x para fuentes de alta calidad (por ejemplo, reproductores de videodiscos, receptores satelitales). Seleccione Entrelazada, Progresiva o Cinemotion.	
	Entrelazada	Recomendado para imágenes en movimiento.
	Progresiva	Recomendado para imágenes fijas y texto.
	Cinemotion	Brinda una imagen de calidad óptima, detectando automáticamente el contenido de las películas y aplicando un proceso de despliegue 3/2. Las imágenes móviles revistan mayor claridad y naturalidad.

Uso del menú Audio

Para seleccionar el menú Audio

1. Oprima MENU.
2. Use la perilla control para pasar al icono de audio y oprima ⊕.
3. Use la perilla control para desplazarse a través de las diversas funciones.
4. Oprima ⊕ para seleccionar una función. Aparecerá el ajuste correspondiente a la función.
5. Use la perilla control para efectuar los ajustes deseados.
6. Oprima ⊕ para seleccionar o aceptar el ajuste.
7. Oprima MENU para salir de la pantalla del menú.

Para restaurar los ajustes originales de fábrica para Agudos, Graves y Balance

❑ Oprima RESET en el control remoto cuando se encuentre en el menú Audio.

Selección de opciones de Audio

El menú Audio incluye las siguientes opciones:

Opción	Descripción	
Agudos	Ajuste para disminuir o aumentar los tonos de alta frecuencia.	
Graves	Ajuste para disminuir o aumentar los tonos de baja frecuencia.	
Balance	Ajuste para enfatizar el sonido de la bocina izquierda o derecha.	
Autovolumen	SI	Seleccione para estabilizar el volumen.
	NO	Seleccione para desactivar Autovolumen.
Efecto	TruSurround	Seleccione para obtener sonido envolvente (sólo para programas estereofónicos).
	Simulado	Añade un efecto de sonido envolvente simulado en los programas monofónicos.
	NO	Recepción estereofónica o monofónica normal.

Opción	*Descripción*	
MTS *Disfrute de programas estereofónicos bilingües y monofónicos*	Estéreo	Seleccione para la recepción en estereofónica al ver un programa estereofónico.
	Auto-SAP (Programa secundario de audio)	Seleccione para que el televisor cambie automáticamente a un segundo programa de audio cuando se reciba una señal. (Si no se recibe señal SAP, el televisor permanecerá en el modo Estéreo.)
	Monofónico	Seleccione para la recepción monofónica. (Se utiliza para reducir el ruido durante las transmisiones estereofónicas.)
Bocinas	SI	Seleccione para activar las bocinas del televisor.
	NO	Seleccione para desactivar las bocinas del televisor y escuchar el sonido de éste sólo a través de las bocinas del sistema de sonido externo.
Salida de Audio *Control fácil de ajustes de volumen*	Puede cambiarse esta opción únicamente cuando la opción Bocinas está en NO.	
	Variable	Varía el volumen de acuerdo con los ajustes del televisor, lo cual resulta útil cuando se quiere usar el control remoto del televisor para ajustar el volumen que sale de un sistema de sonido independiente.
	Fija	La señal de audio que el televisor envía al audio receptor mantiene un nivel constante. Use el control remoto del audio receptor para ajustar el volumen.

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Uso del menú Canal

Para seleccionar el menú Canal

1. Oprima MENU.
2. Use la perilla control para pasar al icono de canales y oprima ⊕.
3. Use la perilla control para desplazarse a través de las diversas funciones.
4. Oprima ⊕ para seleccionar una función. Aparecerá el ajuste correspondiente a la función.
5. Use la perilla control para efectuar los ajustes deseados.
6. Oprima ⊕ para seleccionar o aceptar el ajuste.
7. Oprima MENU para salir de la pantalla del menú.

Selección de opciones de Canal

El menú Canal incluye las siguientes opciones:

Opción	*Descripción*	
Canal Favorito	1 Oprima ⊕ para seleccionar el número de un canal favorito. 2 Use la perilla control para desplazarse a través de los canales hasta encontrar el canal que desee agregar a sus favoritos. 3 Oprima ⊕ para seleccionarlo.	
Cable	SI	Seleccione si está recibiendo canales mediante un sistema de cable.
	NO	Seleccione si está utilizando una antena.
	✍ Debe ejecutar Autoprogramación después de cambiar el ajuste de Cable.	
Fijar Canal *Resulta útil si tiene conectado un descodificador o un receptor satelital*	2-6	"Fije" el canal de su televisor en 3 ó 4 y use el descodificador, videocasetera o receptor satelital para cambiar canales. Seleccione una de estas opciones si el dispositivo está conectado a la entrada VHF/UHF.
	AUX 2-6	Igual que el 2-6, salvo que se selecciona una de estas opciones si el dispositivo está conectado a la entrada AUX (vea la página 8).
	VIDEO 1	Utilice esta opción si el dispositivo está conectado a las entradas de Audio y Video.
Autoprogramación	Programa automáticamente el televisor para todos los canales que se reciban.	

Opción	*Descripción*
Omitir/ Añadir Canal	Elimina y agrega canales. **1** Use la perilla control para desplazarse a través de los canales hasta encontrar el canal que desee omitir o agregar. **2** Oprima ⊕ para seleccionarlo. **3** Oprima la perilla control (↑/↓) para Agregar u Omitir el canal seleccionado. **4** Oprima ⊕ para aceptar el cambio.
Nombre de Canal	Permite etiquetar un máximo de 20 canales con las siglas de la emisora.

Uso del menú Paterno

El menú Paterno le permite impedir que el televisor capte hasta cuatro canales.

Para seleccionar el menú Paterno

1. Oprima MENU.
2. Use la perilla control para pasar al icono Paterno y oprima ⊕.
3. Use los botones 0-9 del control remoto para asentar su contraseña de cuatro dígitos.
4. Confirme su contraseña, volviendo a asentarla. Aparecerán las opciones del menú Paterno.
5. Use la perilla control para efectuar los ajustes deseados.
6. Oprima ⊕ para seleccionar o aceptar el ajuste.
7. Oprima MENU para salir de la pantalla del menú.

> ✍ Usted necesita su contraseña para poder tener acceso al menú Paterno en un futuro. Si usted olvidó su contraseña, vea “Pérdida de contraseña” en página 54.

Para desactivar la supresión de canales:

❑ Seleccione la opción NO en la lista de canales.

Uso del menú Paterno

El menú Paterno tiene la siguiente opción:

Opción	*Descripción*
Suprimir Canal	1 Seleccione la posición (1-4) para el canal que desee suprimir. 2 Seleccione el canal de la lista de canales (1-125).

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Uso del menú Reloj

Para seleccionar el menú Reloj

1. Oprima MENU.
2. Use la perilla control para pasar al icono del reloj y oprima ⊕.

Para poner la hora actual

1. Use la perilla control para seleccionar "Hora actual" y luego oprima ⊕.
2. Si está vigente el horario de verano, primero ponga esta modalidad en SÍ. (El horario de verano entra en vigor durante la primavera y termina en otoño.)
3. Use la perilla control para poner la hora correcta y luego oprima ⊕.
4. Oprima MENU para salir de la pantalla de menú.

Para activar el reloj

Antes de activar el reloj, no se olvide de poner el reloj interno de su televisor a la hora actual (y, si corresponde, de activar la modalidad de horario de verano). Para ver la hora del reloj interno, oprima el botón DISPLAY del control remoto.

1. Con la perilla control, seleccione "Reloj 1" o "Reloj 2" y luego oprima ⊕.
2. Use la perilla control para asentar la fecha, hora, duración y canal de su preferencia y luego oprima ⊕.
3. Oprima MENU para salir de la pantalla del menú.

Para reinicializar los relojes

- ❑ Oprima RESET en el control remoto cuando se encuentre en el menú Reloj. Así quedarán restablecidos los ajustes originales de fábrica.

Selección de opciones de Reloj

El menú Reloj incluye las siguientes opciones:

Opción	*Descripción*	
Reloj 1 Reloj 2	Programar	Seleccione para indicar el día, hora, duracíon y canal correspondiente a cada reloj.
	NO	Seleccione para apagar el reloj respectivo. (Se guardará la seleccion anterior.)
Hora actual	Ajusta la hora actual.	
Hora de verano	SI	Seleccione en primavera para ajustar la hora durante el horario de verano.
	NO	Seleccione en otoño para ajustar la hora al final de el horario de verano.

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Uso del menú Ajustes

Para seleccionar el menú Ajustes

1 Oprima MENU.

2 Use la perilla control para pasar al icono de ajustes y oprima .

3 Use la perilla control para desplazarse a través de las funciones.

4 Oprima para seleccionar una función. Aparecerá el ajuste correspondiente a la función.

5 Use la perilla control para desplazarse por las opciones.

6 Oprima para seleccionar o aceptar el ajuste.

7 Oprima MENU para salir de la pantalla del menú.

Selección de opciones de Ajustes

El menú Ajustes incluye las siguientes opciones:

Opción	*Descripción*	
Caption Vision	Permite realizar la selección entre los tres modos de subtítulo (para programas que se emiten con subtítulos).	
	CC1, CC2, CC3, CC4	Muestra una versión impresa del diálogo o los efectos de sonido de un programa. (Debe seleccionarse en CC1 para la mayoría de los programas.)
	TEXT1, TEXT2, TEXT3, TEXT4	Muestra información de la cadena o emisora utilizando la mitad de la pantalla o toda (si el canal ofrece este servicio).
	XDS (Servicio ampliado de datos)	Muestra el nombre de la cadena y del programa, su duración y la hora de emisión si la emisora ofrece este servicio.
	NO	Desactiva Caption Vision.

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Para utilizar esta función con videodiscos para pantalla panorámica, ajuste el reproductor de videodiscos en la proporción16:9.

Opción	*Descripción*	
Etiqueta de Video	Esta función le permite identificar los aparatos de audio y video que usted haya conectado al televisor, a fin de poder identificarlos en la pantalla al usar el botón TV/VIDEO. Una vez seleccionada la opción Etiqueta de Video en el menú Video, use la perilla control para hacer resaltar la entrada que quiere etiquetar y luego oprima para seleccionarla. Después, use la perilla control para recorrer las etiquetas. Oprima para seleccionar el aparato que conectó a cada entrada en la parte trasera del televisor. Seleccione "Omitir" si no tiene conectado un aparato a la entrada respectiva.	
	VIDEO 1/2/3/4	VHS, 8mm, Beta, LD, Juego, Satélite, Videodiscos, Web, Receptor, Televisión digital, Omitir
	VIDEO 5/6	Alta definición, Videodiscos, Televisión digital, Omitir
	Si selecciona Omitir, el televisor omitirá esta conexión cuando oprima el botón TV/VIDEO.	
Rotación	Permite corregir las inclinaciones de la imagen.	
Idioma	Seleccione el idioma en que desea ver todos los menús en pantalla.	
16:9 Realzado	Proporciona una resolución realzada de imagen para fuentes de pantalla panorámica, como videodiscos (disponible solamente cuando el televisor se encuentra en el modo VIDEO). Oprima TV/VIDEO y seleccione una de las siguientes opciones:	
	AUTO	Para activarse automáticamente al recibirse una señal 16:9.
	SI	Para activarse manualmente.
Demostración	Realiza una demostración de los menús en pantalla.	

Aparece AUTO/SI cuando el televisor está en el modo VIDEO 1-6.

Aparece SI/NO cuando el televisor está en el modo VIDEO 5-6 y se recibe una señal 480p.

Información adicional

Resumen

En este capítulo se incluyen los siguientes temas:

Tema	Página
Programación del control remoto	48
Uso del control remoto con otros aparatos	51
Solución de problemas	53
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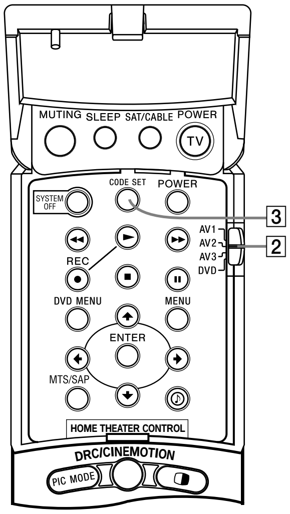
Programación del control remoto

El control remoto está programado para utilizar equipos de video Sony.

Equipo Sony	Posición del selector del control remoto	Clave programable
Videocaseteras Beta, ED Beta	AV1	303
Videocasetera de 8 mm	AV2	302
Videocasetera VHS	AV3	301
Reproductor de videodiscos	DVD	751

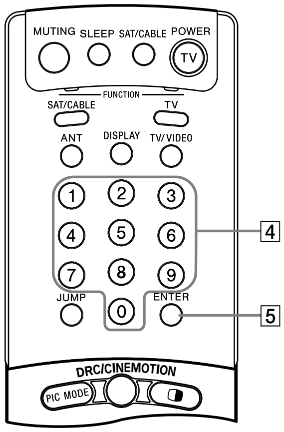


Si dispone de algún equipo de video que no sea Sony que desee controlar con el control remoto del televisor, utilice los siguientes procedimientos para programar el control remoto.

> El equipo debe disponer de capacidad remota infrarroja (IR) para poder utilizarse con el control remoto.

1. Consulte las Claves de fabricantes en la página 50 y localice la clave de tres dígitos correspondiente a su aparato. (Si aparece más de una clave, use la que aparece primero para llevar a cabo el siguiente procedimiento.)
2. Abra la tapa del control remoto y deslice el selector a la entrada que corresponda al tipo de aparato deseado.
3. Oprima CODE SET y cierre la tapa del control remoto.

> Debe realizar el paso 4 antes de 10 segundos después del paso 3 o deber iniciar la operación de nuevo a partir del paso 2 y 3.



4. Asiente la clave de tres dígitos del fabricante.
5. Oprima ENTER.
6. Para verificar si funciona la clave, apunte el control remoto del televisor al equipo y oprima el botón verde POWER (encendido) que corresponda a ese equipo. Si responde el aparato, todo está bien. De lo contrario, intente con las demás claves correspondientes a su aparato.

Consejos

- ❑ Si se indica más de una clave, intente introducirlos uno por uno hasta que encuentre la que sirve con su equipo.
- ❑ Si introduce una clave nueva, la clave que había introducido previamente durante el ajuste se borrará.
- ❑ En casos de excepción, es posible que no se pueda emplear el equipo con el control remoto suministrado. En este caso, utilice la unidad de control remoto propia del equipo.
- ❑ Cuando quite las pilas para sustituirlas, las claves pueden regresar al ajuste de fábrica y será preciso volver a programarlas.

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Claves de fabricantes

Videocaseteras

Fabricante	Clave
Sony	301, 302, 303
Admiral (M. Ward)	327
Aiwa	338, 344
Audio Dynamic	314, 337
Broksonic	319, 317
Canon	309, 308
Citizen	332
Craig	302, 332
Criterion	315
Curtis Mathes	304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318, 341
Fisher	330, 335
Funai	338
General Electric	329, 304, 309
Go Video	322, 339, 340
Goldstar	332
Hitachi	306, 304, 305, 338
Instant Replay	309, 308
JC Penney	309, 305, 304, 330, 314, 336, 337
JVC	314, 336, 337, 345, 346, 347
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 330, 335, 338
Magnavox	308, 309, 310
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	305, 304
Mitsubishi / MGA	323, 324, 325, 326
Multitech	325, 338, 321
NEC	314, 336, 337
Olympic	309, 308
Optimus	327
Orion	317
Panasonic	308, 309, 306, 307
Pentax	305, 304
Philco	308, 309
Philips	308, 309, 310
Pioneer	308
Quasar	308, 309, 306
RCA / PROSCAN	304, 305, 308, 309, 311, 312, 313, 310, 329
Realistic	309, 330, 328, 335, 324, 338
Sansui	314
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323, 324, 325, 326
Sharp	327, 328
Shintom	315
Signature 2000 (M. Ward)	338, 327
SV2000	338
Sylvania	308, 309, 338, 310
Symphonic	338
Tashiro	332
Tatung	314, 336, 337
Teac	314. 336, 338, 337
Technics	309, 308
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
Yamaha	314, 330, 336, 337
Zenith	331

Reproductores de discos láser

Fabricante	Clave
Sony	701
Panasonic	704, 710
Pioneer	702

Reproductores de videodiscos

Fabricante	Clave
Sony	751
GE	755
Hitachi	758
JVC	756
Magnavox	757
Mitsubishi	761
Oritron	759
Panasonic	753
Philips	757
Pioneer	752
RCA / PROSCAN	755
Samsung	758
Toshiba	754
Zenith	760

Decodificadores

Fabricante	Clave
Sony	230
Hamlin / Regal	222, 223, 224, 225, 226
Jerrold / G. I.	201, 202, 203, 204, 205, 206, 207, 208, 218
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

Receptores de satélite

Fabricante	Clave
Sony	801
Dish Network	810
Echostar	810
General Electric	802
Hitachi	805
Hughes	804
Mitsubishi	809
Panasonic	803
RCA / PROSCAN	802, 808
Toshiba	806, 807

Uso del control remoto con otros aparatos

Con una videocasetera

Abra la tapa del control remoto y deslice el selector a la entrada de audio y video que usted programó para la videocasetera.

Para ...	Oprima
Activar / desactivar	Botón verde de POWER (debajo de la tapa)
Cambiar de canal	CH +/–
Grabar	► y REC simultáneamente
Reproducir	►
Detener el funcionamiento	■
Avanzar rápidamente	►►
Rebobinar la cinta	◄◄
Hacer pausa	❚❚
Buscar una imagen hacia delante o hacia atrás	►► o ◄◄ durante la reproducción (deje de oprimirlo para reanudar la reproducción normal)

Con un reproductor de videodiscos

Abra la tapa del control remoto y deslice el selector a la entrada de audio y video que usted programó para la videocasetera.

Para ...	Oprima
Activar / desactivar	Botón verde de POWER (debajo de la tapa)
Reproducir	►
Detener el funcionamiento	■
Hacer pausa	❚❚
Recorrer las diferentes pistas de un audiodisco	►► para avanzar o ◄◄ para retroceder
Recorrer los diferentes capítulos de un videodisco	CH+ para avanzar o CH– para retroceder
Mostrar el menú DVD	DVD MENU
Ver el menú (Ajustes)	MENU

(A la siguiente)

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Con un decodificador

Para ...	Oprima
Activar / desactivar	SAT/CABLE (botón verde de POWER)
Seleccionar decodificador	SAT/CABLE (botón de FUNCTION)
Seleccionar canales	Botones 0–9, ENTER
Cambiar de canal	CH +/–
Volver al canal anterior	JUMP

Con un receptor satelital

Para ...	Oprima
Activar / desactivar	SAT/CABLE (botón verde de POWER)
Seleccionar receptor satelital	SAT/CABLE (botón de FUNCTION)
Seleccionar canales	Botones 0–9, ENTER
Cambiar de canal	CH +/–
Volver al canal anterior	JUMP
Ver el número de canal	DISPLAY
Ver la guía SAT	GUIDE
Ver el menú SAT	MENU
Mover el resalte (cursor)	Perilla control
Seleccionar opciones	Botón ⊕

Con un reproductor de discos láser

Abra la tapa del control remoto y deslice el selector a la entrada de audio y video que usted programó para la videocasetera.

Para ...	Oprima
Activar / desactivar	Botón verde de POWER (debajo de la tapa)
Reproducir	►
Detener el funcionamiento	■
Hacer pausa	❚❚
Buscar una imagen hacia delante o hacia atrás	►► o ◄◄ durante la reproducción (deje de oprimirlo para reanudar la reproducción normal)
Buscar capítulos hacia delante o atrás	CH +/–

Solución de problemas

Problema	Soluciones posibles
No hay imagen (la pantalla no se enciende), no hay sonido	❑ Si el televisor no enciende y una luz roja sigue parpadeando, es posible que el televisor necesite servicio de un técnico. Llame al Centro de Servicio Sony. ❑ Asegúrese de que el cable de corriente está enchufado. ❑ Oprima el botón de encendido en la parte delantera del televisor. ❑ Compruebe si el ajuste de TV / VIDEO es correcto: para ver el televisor, póngalo en TV y para ver las imágenes de un equipo conectado, póngalo en VIDEO1, 2, 3, 4, 5 ó 6. ❑ Pruebe con otro canal. Podría ser un problema de la emisora.
El control remoto no funciona	❑ Las pilas podrían estar bajas. Revise las pilas y, de ser necesario, sustitúyalas. ❑ Oprima TV (FUNCTION) cuando utilice el televisor. ❑ Asegúrese de que el cable de corriente del televisor está conectado con firmeza a la toma de corriente de la pared. ❑ Mantenga el televisor a cuando menos un metro o más de distancia de los tubos fluorescentes. ❑ Compruebe la orientación de las pilas.
Imagen oscura, mala o inexistente (pantalla encendida), buen sonido	❑ Ajuste el valor de Contraste del menú Video (consulte la página 36). ❑ Ajuste el valor de Brillo del menú Video (consulte la página 36). ❑ Compruebe las conexiones de la antena y del cable.
Buena imagen, sin sonido	❑ Oprima MUTING para que desaparezca “MUTING” de la pantalla (consulte la página 4). ❑ Compruebe que Bocinas está en SI en el menú Audio (consulte la página 39).
No se captanlos canales de banda alta (UHF) al usar una antena	❑ Cambie Cable a NO (consulte la página 40). ❑ Utilice Auto Programación del menú Canal para añadir canales que se reciban y que no se encuentren en la memoria del televisor (consulte la página 40).
Sin color	❑ Ajuste los valores de Color del menú Video (consulte la página 36).
Sólo aparecen interferencias y ruido en la pantalla	❑ Compruebe las conexiones de antena / cable. ❑ Cambie a otro canal; podría tratarse de un problema de la emisora. ❑ Oprima ANT para cambiar el modo de entrada (consulte la página 4).
Rayas o líneas con puntos	❑ Ajuste la antena. ❑ Aleje el televisor de fuentes de interferencia como automóviles, letreros de neón o secadores de pelo.
El televisor se queda fijo en un canal	❑ Utilice Autoprogramación del menú Canal para añadir canales que se reciban y que no se encuentren en la memoria del televisor (consulte la página 40). ❑ Compruebe los ajustes de Fijar Canal (consulte la página 40).
Imágenes dobles o fantasmas	❑ Utilice una antena exterior altamente direccional o un cable (cuando el problema se debe a reflejos provocados por montañas cercanas o edificios altos).
Imposible utilizar el menú	❑ Si la opción del menú que se desea seleccionar aparece en gris, no se puede seleccionar.
No se capta ningún canal al usar el sistema de televisión por cable	❑ Utilice Autoprogramación del menú Canal para añadir canales que se reciban y que no se encuentren en la memoria del televisor (consulte la página 40). ❑ Compruebe los ajustes de cable. ❑ Compruebe que Cable esté en SI en el menú Canal (consulte la página 40).

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(Continúa)

Problema	Soluciones posibles
Falta volumen al usarse un decodificador	❑ Aumente el volumen del decodificador mediante el control remoto de éste. Después oprima TV (FUNCTION) y ajuste el volumen del televisor.
Imposible recibir canales	❑ Utilice Autoprogramación del menú Canal para añadir canales de televisión que se reciban y que no se encuentren en la memoria del televisor (consulte la página 40).
Imposible seleccionar un canal	❑ Utilice Autoprogramación del menú Canal para añadir canales de televisión que se reciban y que no se encuentren en la memoria del televisor (consulte la página 40).
Pérdida de contraseña	❑ Mediante la pantalla de la contraseña (vea la página 42), ingrese la contraseña maestra, 4357. Esta contraseña maestra borra la contraseña registrada anteriormente, mas no permite ver los canales suprimidos.
No se puede cambiar el canal con el control remoto	❑ Si está usando otro dispositivo para cambiar canales, asegúrese que no ha cambiado sin querer su televisor del canal 3 ó 4. ❑ Si está usando otro aparato para cambiar canales, no olvide oprimir el botón de funciones correspondiente a ese aparato.
No se puede ver la lista de los demás aparatos de video que están conectados al televisor.	❑ Asegúrese que la función de Etiqueta de Video no está en "Omitir" (consulte la página 45).
Aparece un cuadro negro en la pantalla	❑ Está seleccionada una opción de texto en el menú de Ajustes y no se está transmitiendo texto (consulte la página 44 para cambiar los Ajustes). Para apagar esta función, seleccione NO en la opción Caption Vision (subtítulos). Si desea ver subtítulos, escoja CC1 en lugar de Texto 1-4.
No aparece la imagen gemela o ésta permanece sin movimiento	❑ Asegúrese que la imagen gemela se encuentre sintonizada con una fuente de video o un canal con programación al aire. ❑ Es posible que se encuentre sintonizada con una entrada de video que no tiene nada conectado. Vea sus entradas de video, utilizando el botón de TV/VIDEO. ❑ Imagen Gemela no puede recibir señal de la entrada AUX. Si usted conectó una videocasetera o receptor satelital a la entrada AUX del televisor, no aparecerá la imagen en la ventanilla derecha.
Se ve el mismo programa en ambas ventanillas de Imagen Gemela	❑ Es posible que ambas ventanillas se encuentren sintonizadas al mismo canal. Trate de cambiar el canal, ya sea de la ventanilla izquierda o de la derecha. ❑ Es posible que su instalación requiera que todos los canales lleguen a través del decodificador. El decodificador decodifica una sola señal a la vez. De ser posible, conecte un cable directamente a la entrada VHF/UHF de su televisor. (Esto funciona sólo si su sistema de cable suministra una señal decodificada.)
Lo único que aparece en la ventanilla izquierda o derecha de Imagen Gemela es la televisión	❑ Asegúrese que Etiqueta de Video no esté programado para omitir sus entradas de video. Consulte en menú Ajustes en las páginas 44 y 45.

Si despues leer este manual de instrucciones desea realizar otras consultas relacionadas con el uso de su nuevo televisor Sony, comuníquese con su distribuidor Sony.

Especificaciones

Todos los modelos (especificaciones generales)		
Tubo de imagen	Tubo FD Trinitron	
Antena	Terminal externo de 75 ohm para VHF / UHF	
Sistema de televisión	NTSC, estándar americano de televisión	
Cobertura de canales		
VHF	2-13	
UHF	14-69	
Televisión por cable	1-125	
Número de entradas / salidas		
Video (IN)	4	1 Vpico-pico, 75 ohm asimétricos, sincronización negativa
S Video (IN)	3	Y: 1 Vpico-pico, 75 ohm asimétricos, sincronización negativa C: 0,286 Vpico-pico (señal de sincronización cromática), 75 ohm
Audio (IN)	6	500 mVrms (modulación 100%) Impedancia: 47 kiloohm
Audio (OUT)	1	Más de 408 mVrms al máximo ajuste de volumen (variable) Más de 408 mVrms (fijo) Impedancia (salida): 2 kiloohm
Salida de monitor	1	1 Vpico-pico, 75 ohm asimétricos, sincronización negativa
CONTROL S (IN / OUT)	1	
Entrada para componentes de video	2 (Y, P_B, P_R)	Y: 1,0 Vpico-pico, 75 ohm asimétricos, sincronización negativa; P_B: 0,7 Vpico-pico, 75 ohm; P_R: 0,7 Vpico-pico, 75 ohm

(A la siguiente)

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KV-38DRC2

Accesorios suministrados	
Control remoto	RM-Y184
Pilas AA (R6)	2 suministradas para el control remoto
Accesorios opcionales	
Cable de audio y video	VMC-810 / 820 / 830 HG
Cable de audio	RKC-515HG
Cable para componentes de video	VMC-10 / 30 HG
Cable S-Link	RK-G69HG
Suporte para televisor	SU-36XBR45
Tamaño de pantalla visible	36 pulgadas (91,4 cm) medida diagonal
Tamaño real del TRC	38 pulgadas (96,5 cm) medida diagonal
Salida de la bocina	15W x 2
Dimensiones (an x al x prf)	99,4 x 75,5 x 62,2 cm (39 1/4 x 29 3/4 x 24 1/2 pulgadas)
Peso	108 kg (238 libras)
Suministro eléctrico	ca 120 V, 60 Hz
Consumo de energía	
En uso	245 W
En espera	2 W

KV-38DRC2C

Accesorios suministrados	
Control remoto	RM-Y184
Pilas AA (R6)	2 suministradas para el control remoto
Accesorios opcionales	
Cable de audio y video	VMC-810 / 820 / 830 HG
Cable de audio	RKC-515HG
Cable para componentes de video	VMC-10 / 30 HG
Cable S-Link	RK-G69HG
Suporte para televisor	SU-36XBR45
Tamaño de pantalla visible	36 pulgadas (91,4 cm) medida diagonal
Tamaño real del TRC	38 pulgadas (96,5 cm) medida diagonal
Salida de la bocina	15W x 2
Dimensiones (an x al x prf)	99,4 x 75,5 x 62,2 cm (39 1/4 x 29 3/4 x 24 1/2 pulgadas)
Peso	108 kg (238 libras)
Suministro eléctrico	ca 220 V, 50 Hz
Consumo de energía	
En uso	245 W
En espera	2 W

El diseño y las especificaciones están sujetos a cambios sin previo aviso.

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